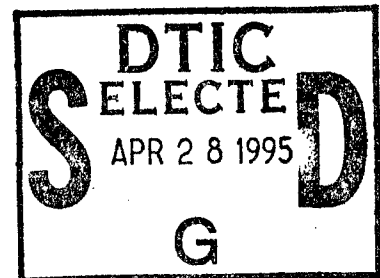


NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

IMPROVED MARKET RESEARCH IN UNITED STATES MARINE CORPS FIELD CONTRACTING

by

Mark Evan Lyon

December, 1994

Principal Advisor:

Mark W. Stone

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**IMPROVED MARKET RESEARCH IN
UNITED STATES MARINE CORPS
FIELD CONTRACTING**

by

Mark E. Lyon
Captain, United States Marine Corps
B.A., University Of Notre Dame, 1987

Submitted in partial fulfillment
of the requirements for the degree of

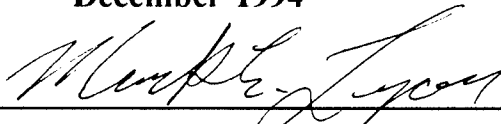
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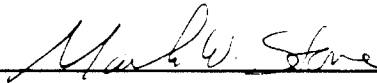
December 1994

Author:



Mark E. Lyon

Approved by:



Mark W. Stone, Principal Advisor



Rebecca J. Adams, Associate Advisor



David Whipple, Chairman,
Department of Systems Management

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ABSTRACT

This thesis investigates the current use of, and the potential for improving, market research within the Marine Corps field contracting community. It explores the nature of the procurements typically conducted, and the information needs of contracting personnel. It examines the participation by customers in market research efforts, and advance procurement planning. It also analyzes the barriers to effective market research, or improvements to the current system.

Knowledge and understanding of pertinent markets is essential for optimum procurement decisions. Market research is a vital element of effective procurement. Effective market research can increase competition in contracting, and provide valuable market information which can then be used to make better procurement decisions. This thesis will identify the shortcomings in the use of market research by the Marine Corps field contracting personnel. It will also provide recommendations on how the Marine Corps might best improve market research at the field activities.

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I. INTRODUCTION

The Competition In Contracting Act (CICA), (Title VII of the Spending Reduction Act and Deficit Reduction Act of 1984, Public Law 98-369) levies many requirements upon the procurement process. Among these is the requirement that "In preparing for the procurement of property or services, an executive agency shall use advance procurement planning and market research." (Conyers, 1985; pp. 3). Market Research is the sum of those activities involving the collection and analysis of data designed to discover new sources of supply; finding new products, processes, and concepts which may fulfill a Government requirement. Market research is also designed to achieve a greater understanding of the industrial sectors in which a contracting activity buys. The ultimate goal of market research is to be able to fill requirements faster, at lower cost, and with higher quality products and services. In the private sector, market research, or "Purchasing Research" as it is commonly referred to, has resulted in significant cost savings, increases in profits, and improvements in product quality. Many researchers have postulated that properly structured market research Programs can result in similar cost savings and product quality improvements for the Government. This thesis investigates the potential benefits of attempting to utilize commercial style market research activities by Marine Corps Field contracting organizations.

A. RESEARCH QUESTIONS

1. Primary Question

How might the Marine Corps institute an effective Market Research program in the field contracting community?

2. Subsidiary Questions

a. What is the current state of market research within Marine Corps Field contracting?

b. What would be the benefits of a formal Market Research Program within the Marine Corps field contracting community?

c. What is "an effective Market Research program" within the scope of Marine Corps field contracting needs?

d. What is the most feasible Market Research program, suited to the Marine Corps field contracting environment?

B. SCOPE, LIMITATIONS, AND ASSUMPTIONS

The areas examined are limited to Marine Corps field contracting organizations and their need for, and ability to perform market research. Marine Corps Systems Command has been excluded from the study, except when referenced for background purposes. Its purpose is to buy major systems for the Marine Corps, which is very different from the day-to-day, operational type of buying done at field contracting activities. Marine Corps Field contracting activities are relatively homogenous, and a Market Research Program designed for one could easily be utilized by another with very little customization required.

In many cases, hard statistical data are not available, largely due to shortcomings of the Automated Data Processing (ADP) environment within which the field contracting activities operate. Consequently, this thesis relies on manually prepared compilations of data, professional estimates, and the experience and intuition of those surveyed.

C. RESEARCH METHODOLOGY

Information for the preparation of this thesis is gathered primarily from four sources: literature review,

responses to the researcher's survey questionnaire, telephone interviews, and personal interviews.

The body of literary knowledge on the subject of market research is not large. The pool of writings on the subject of Purchasing Research as it applies to the civilian sector is somewhat larger. Much of this can provide some understanding of the objectives and methods applicable to Government market research. Literary sources came initially from the Dudley Knox Library aboard the Naval Postgraduate School, searches of numerous databases through the on-line "Dialog" system, searches of the on-line catalogs of other universities via the INTERNET, and works brought to the attention of the researcher through interviews. The literature review provides a background understanding of the subject matter as it works in theory, and as it is conducted both in Government and the private sector.

A survey was mailed to the Contracting Officer of every major Marine Corps base including the Marine Corps Logistics Bases at Albany, Georgia, and Barstow, California. The Director and Deputy Director of Contracts at Marine Corps Systems Command (MARCORSYSCOM) were solicited as well, to gain a degree of understanding as to how market research is conducted in the major systems community. In some cases where multiple surveys were sent to any one activity, consolidated responses were returned and, therefore, represent the corporate or "committee" opinion of that office's senior management team.

Numerous telephone conversations and interviews were conducted. Most were with survey respondents and provided an expanded understanding of their views, knowledge, and experience. It was impractical to conduct personal interviews largely because of scheduled classes, and the distance and expense involved. The interviews provided the researcher with a much deeper understanding of the field contracting

environment, including the workload and impediments faced by contracting officers daily. The objective was to uncover what market research was being done, what impediments existed, and how might market research be improved in Marine Corps Field contracting.

D. BACKGROUND

The body of knowledge in market research has grown relatively slowly since the early part of the century. It began in the civilian sector as corporate materials management professionals sought to improve company profits by reducing the cost of procuring raw materials and components. By the 1930's and 1940's, it was receiving more attention by Government agencies, especially as the materiel demands of the Second World War resulted in critical shortages. Only by being fully aware of the trends, crises, developments, and other factors affecting an industry or market sector, can a planner successfully manage the acquisition of materiel and services to fulfill his requirements. (Yoder, 1993; pp.4-6)

Marketing Research is the forbearer, or grand-father of market research. Since the advent of commerce, sellers have been searching for new and better ways to sell products to potential buyers. This seller-based marketing research developed into a major area of research by businessmen and scholars, alike. Companies soon realized that the cost of materiel and components to their final retail products, significantly affected their profit margins and competitive position in the market. Many of the methods, techniques, and concepts of marketing research, then, were employed in Purchasing Research. The objectives were similar, but buyer oriented instead of seller oriented. In the past few decades, industrial purchasing has been recognized as a major, sometimes essential, contributor to the financial health and survival of a firm. In fact, as a company experiences

increasing competition and potential loss of market share, decreasing input costs may be its only competitive edge. (Mulhern, 1989; pp. 2-1 to 2-6)

Market Research is now required by CICA and the Federal Acquisition Regulation (FAR). It is obvious that by enacting CICA, Congress intended to increase the use of full and open competition in Government procurements. Competition, then, will ensure that the Government receives the most advantageous price.

E. BENEFITS OF RESEARCH

As the Department of Defense (DOD) enters a period of reduced budgets, diminishing defense industrial capacity (resulting from lower demand), and an ever changing set of mission requirements, it is forced to acquire matériel and services at lower prices while sustaining or improving quality. This will require innovation in acquisition; the adoption of many commercial practices, such as market research, and test the flexibility and adaptability of procurement regulations. This thesis will assess the current state of market research in Marine Corps Field contracting, and examine the feasibility of enhancing it through the introduction of market research improvements.

II. BACKGROUND AND DEFINITION

Market research is a vital element to effective procurement both in and outside of Government. For Federal Contracting Officers, it is a statutory requirement. This chapter provides a useable definition of market research in the context of Congressional intent, economic theory, and as it is practiced in the field.

A. BACKGROUND

The term "Market Research" has been the source of much confusion. To the uninformed, market research may be confused with marketing research. The latter is, generally, comprised of those exploratory and analytical activities designed to provide a seller with information which enables him to increase sales of his product in the marketplace. The confusion, however, comes about not only because the two terms sound so much alike, but because many of the skills, techniques, and methods used in market research are borrowed from marketing research. In fact, market research and marketing research can be viewed as two subsets of the same discipline: marketing research originating in the consumer setting, with the purpose of "marketing" or selling something; and market research, originating in an industrial setting with the purpose of improving purchasing decisions by a company. The term "Market Research" is a bit of a misnomer. It most resembles what, in the civilian sector, would be referred to as "Purchasing Research." Because it appears in law and regulation as "market research," however, that is the name which has stuck, and is the term used in this thesis. (Yoder, 1993; pp. 8-11. and Mulhern, 1989; pp. 2-7 to 2-12)

In the past few decades, industrial purchasing has taken on an increasingly important role in the financial health of companies. In highly competitive, and rapidly changing world

markets, a company must be knowledgeable of the conditions affecting the availability and price of its input resources and components. These factors have strategic importance and have driven the development of Purchasing Research in the civilian world. The development of market research in the public sector, however, has not closely paralleled its civilian counterpart. This may be due in part to the separation of contracting personnel from technical and requirements personnel, as well as a policy environment which stresses assumptions about market behavior in general rather than observations of actual behavior in Government markets. Another cause may be an administrative aversion to the allocation of resources to specialized, non-operational information systems. (Mulhern, 1989; pp. 2-4 to 2-6)

The requirement to perform market research was born out of public and Congressional frustration with seemingly increasing incidents of waste, fraud, and abuse. Congress traditionally imposes new requirements on the acquisition process after the revelation of significant incidents of defective pricing, over-billing, and fraud scandals. The requirement to ensure "full and open" competition, with the passage of CICA, was one of these (Stewart, 1987; pp. 14). By ensuring that the greatest possible number of vendors are given a fair opportunity to submit bids or proposals for each solicitation, economic theory holds that this competition will drive the price down as low as it can feasibly go. The lack of effective market research has been cited as a reason for lost competitive procurement opportunities. Richard Stewart, in his 1987 graduate thesis on market research cites instances in the congressional debate and testimony surrounding the CICA legislation, which attribute the loss of competitive opportunities to the lack of adequate understanding of market conditions and under-identification of potential sources of supply. (Stewart, 1987; pp. 13-15)

B. DEFINITION OF MARKET RESEARCH

There are, essentially, two working definitions of market research. The first is what Stewart labels as the "narrow view." This narrow definition says that market research amounts to little more than those efforts designed to discover new potential sources of supply to fill a requirement. The language in CICA lends itself to this conception:

Section 303A. (a)(1) In preparing for the procurement of property or services, an executive agency shall use advance procurement planning and market research.

Section 2301. (a)(5) ...[an executive agency] shall use advance procurement planning and market research and prepare contract specifications in such a manner as is necessary to obtain full and open competition....(Conyers, 1985; pp. 3-30)

The FAR does little to expand this definition; "[market research] attempts to ascertain whether other qualified sources capable of satisfying the Government's requirement exist." (FAR, Part 7.000-7.106)

Increasing competition is, obviously, the intent of CICA. If the number of respondents to a solicitation can be increased, the price should be driven as low as it can be expected to go. One of the purposes of market research is, indeed, to identify new potential sources. In many cases, this is even the most significant purpose. Only attempting to increase the potential number of bidders or offerors, however, does not exploit the full potential of possible market research activities. In fact, in markets where competition is already high, the search for more sources becomes less important than other information effective market research can uncover. Research into the debate leading up to the passage of CICA, in fact, demonstrates that there is a broader conception of market research:

Competition in contracting depends on the procuring agency's **understanding of the marketplace**. In addition to advance procurement planning, market research is essential in developing this understanding. Agencies which fail to scope the market for potential competitors—whether by telephone or publicizing in the Commerce Business Daily (CBD)—often resort to sole source contracting when competition is available. (emphasis added) (CICA, 1983; pp. 13)

A broader view is certainly what many researchers and scholars, both inside and outside of Government, subscribe to. The Armed Services Pricing Manual (ASPM) offers the following explanation of market research:

Market analysis and research...is a prime source for much of the information needed in planning for a procurement....Moreover, the greatest potential benefit of market research occurs when procurement offices use (1) knowledge of current technology and trends, (2) understanding of the commercial marketplace, and (3) meaningful presolicitation contact with the private sector and others to influence the development of a competitive solicitation package. (ASPM, 1986; pp. 12-1)

In the "Commercial Practices for Defense Acquisition Guidebook," the Defense Systems Management College offers the following definition:

Market research and surveys are essential to a firm's survival. They are usually a part of the normal, continuous, ongoing activity of a business enterprise. They are used to determine the availability of products and sources, the extent of competition, the range of product performance characteristics, market acceptability, current market prices, and the range of available distribution systems and support services. **The objective is to determine what is available, or potentially available, to satisfy user needs.** Efficient market research starts with a good understanding of user or customer needs. (emphasis added) (Rhoads, 1992; pp. 2-1)

The quote which perhaps best synthesizes all that is market research is offered in a work by Leenders, Fearon, and England. They state that "Purchasing research [market research] is the systematic collection, classification, and analysis of data as a basis for **better purchasing decisions**" (emphasis added) (Leenders, 1985; pp. 497). It is only in becoming an expert in the pertinent market sectors can one hope to maximize purchasing decisions.

C. NEED FOR MARKET RESEARCH

As mentioned above, CICA and the FAR require market research to increase competition. In the next section, some of the other benefits of market research are explored. It is these benefits which prompted Congress to enact CICA. To date, however, little has been done to further market research as a science or discipline in the Government. The United States has entered a new era since the end of the Cold War, with new challenges in the political, economic, and military arenas. By fiscal year 1997, defense spending will have fallen by more than 40 percent in real terms since 1985. Meanwhile, the Administration is committed to maintaining a strong and effective military able to deter aggression against the U.S., its allies, and its interests worldwide. To meet these challenges to national security, the acquisition system must be able to procure high quality, state-of-the-art products from dependable, leading-edge companies quickly. (Preston, 1994; pp. 7-8) The current system spends far too long and too much money procuring equipment and services. Estimates run from 20 percent to 50 percent of every acquisition dollar for the cost of operating the current procurement system (Perry, 1994). To meet the current challenges, reform is imperative. Acquisition regulations and practices which at one time made perfect sense have been rendered obsolete by recent global political and economic events.

The Section 800 Panel (created by Section 800 of the National Defense Authorization Act of 1991) strongly recommended, and Government policy has since been, to pursue the procurement of more commercial off-the-shelf products, dual-use items, and Nondevelopmental Items (NDI). The Secretary of Defense recently reaffirmed this commitment:

DOD must have unimpeded access to commercial technologies more quickly than other countries if it is to maintain its technological superiority.... Strengthen and enforce the preference for commercial items....Support increased use of dual-use technologies and sharing of technology with the commercial sector....(Perry, 1994; pp. 3-11)

By law, DOD must conduct market research before developing a new specification (Adams, 1992; pp. 16). FAR 11.004 requires that the Government conduct market research and analysis to ascertain the availability of commercial products to meet identified requirements (FAR 11.004). Section 8104 of the Federal Acquisition Streamlining Act (FASA) of 1994 amends Chapter 140 of title 10, United States Code with §2377.(c):

PRELIMINARY MARKET RESEARCH. (1) The head of an agency shall conduct market research appropriate to the circumstances--(A) before developing new specifications for a procurement by that agency; and (B) before soliciting bids or proposals for a contract in excess of the simplified acquisition threshold.

The search for commercial products to fulfill defense requirements offers the prospect of significant savings. Commercial products do not come with the added expense of direct research and development costs, they are often sold in competitive markets, resulting in the lowest market clearing price, and are usually capable of more than adequately filling the Government's requirements. Effective market research is essential to identify producers and products which have the

potential to fulfill Government needs. Agencies will have to conduct market research early in the procurement process and use commercial products whenever they meet the Government's minimum needs. (Yoder, 1993; pp. 14)

D. BENEFITS OF MARKET RESEARCH

As discussed, market research can determine whether or not the supplier market is sufficiently competitive. In a free market economy, if one company is making profits in a market sector, theoretically, more companies will enter that market believing they will be able to get a share of the potential profits. As companies enter the market, each will lower its prices in order to attract more buyers. The company offering the lowest price, is likely to sell the most product, and achieve the greatest profit. The larger the number of sellers in the market, the greater the price competition. Each company wants to offer its product at a price lower than its competitors. To do so, any reasonable cost saving efficiencies will be introduced, which will allow a lower product price while ensuring an adequate profit. Thus, when there are a large number of producers, unrestricted competition tends to yield the lowest achievable market price automatically. Consequently, in a competitive market, there is likely to be little information a buyer can use to negotiate a lower price, because the potential supplier is likely to have already discovered it and instituted any internal efficiencies necessary to exploit it. (Gates, 1994) This is one reason Congress devoted a law to competition (CICA, 1983). If full and open competition exists, the lowest price possible is guaranteed by the natural interactions of market forces (guaranteed to the extent that the "free market" is truly free and unregulated). There are, of course, factors which complicate the theory of competition, such as salesmanship and product quality differentiation, but for the most part,

educated Government buyers can counter these factors by recognizing deceptive sales tactics and accurately assessing product quality. (Gates, 1994)

Beyond identifying enough potential bidders or offerors for a procurement to make it sufficiently competitive, it is in less than ideally competitive environments where other benefits of market research become more significant. The categories of information one might seek are discussed in the next section. Insights in the market conditions and the supplier environment in any of these areas can provide the Government purchaser considerable benefit. This information, ultimately, can be used to the Government's advantage during contract negotiations or the evaluation of proposals and bids. For example, understanding the trends in overhead costs or General and Administrative (G&A) rates in the pertinent industry can be used to evaluate a bid or proposal for a procurement from that industry. Effective market research can also yield information which assists the Government agency in defining and refining its requirements by bringing to light the technology, products, and processes available in the commercial marketplace. The benefits to be gained can be numerous and are dependent on the particular piece of information a researcher finds he can utilize. Appendix B, lists many possible techniques, and details many of the benefits to be realized from them.

E. CONDUCT OF MARKET RESEARCH

The number of ways to conduct market research are as varied as the number of organizations conducting it. It is clear, however, given limited manpower, time, and money, that an organized and methodical system must be utilized if one is

to optimize the results of his efforts.¹ The activities in market research fall, generally, into two categories; Market Surveillance and Market Investigation. Market surveillance is:

... the ongoing process of the acquisition agency to canvass the technology and product developments in its areas of expertise. While market surveillance is not seeking to fulfill a specific need, it is essential to maintaining a viable technology basis. A good market surveillance involves subscribing to trade journals, reading manufacturer catalogs and new product announcements, attending industrial shows and conferences, as well as reviewing unsolicited proposals. The depth of the market surveillance is dependent upon the complexity of the component or area of expertise. A necessary change...is that the market surveillance be an ongoing function and not dependent on a request for information (RFI) to support a user's needs. (Adams, 1992; pp. 16-17)

Such surveillance is increasingly necessary as the pace of changing technology increases. Buyers must be aware of the latest developments to effectively comprehend the market environment they will be purchasing in. Such surveillance is used regularly by commercial firms to determine the availability of products and sources, the extent of competition, the range of product performance characteristics, and prevailing market prices. Additionally, procurement professionals must remember not to exclude the availability of products in other Government inventories, those used by allied nations, and the skills and research done at Government laboratories. (Rhoads, 1992; pp. 2-1 to 2-4)

Market investigation has a more narrow focus. Market investigations are conducted in response to specific, defined requirements and focus on solutions to those specific

¹ Methods of organizing for and conducting Market Research are covered in detail by Stewart as well as by Elliot C. Yoder in his graduate Thesis (Yoder, 1993). Another excellent source is Professor John Mulhern's as yet unpublished work on the subject (Mulhern, 1989). I will only attempt to synopsise here, but recommend these sources for in-depth discussion of the subjects.

requirements. One purpose is to determine what technology, products, or services are available to fulfill user needs. (Adams, 1992; pp. 17) Market investigations are, therefore, normally limited in duration and specific in nature.

Market Surveys and Market Investigations, therefore, don't merely provide for increased competition. By understanding the workings of the pertinent markets and discovering how other agencies or private firms fill the same or similar requirements, they can actually assist the Government in framing and deriving its requirement.

1. Organizing for Market Research

There are four generally accepted ways of organizing for market research. The first is to establish a full time market research staff. Such staff members are recruited for, or develop, research skills which may not otherwise be available. The average buyer does not have the time to devote to developing these skills or conducting in-depth research. Full time staff efforts can be devoted solely to that purpose. Establishing a new functional unit may send a message that Management feels the market research function is very important. A commitment to the importance of market research could certainly be demonstrated by requiring assignment to the market research staff for the career progression of contracting professionals. (Mulhern, 1989; pp. 7-7 to 7-9) The major disadvantage to this approach is the large initial investment. New positions must be created, and salaries paid. There are also the costs associated with the resultant procurement delays. Market research takes time, and additional *market investigations* directly affect each procurement. Increased *market surveillance* indirectly delays procurement actions by consuming more of the contracting officer's and contract specialist's time. (Mulhern, 1989; pp. 7-7)

The second approach is to assign market research tasks to contracting personnel in existing billets, on top of their

current work load. One advantage in this case is that the research would be conducted by persons who are most knowledgeable in the markets concerned. It is also less expensive than establishing entirely new positions. The primary disadvantage is that the increased work load on individual buyers will cause greater delays in executing their procurements. Theoretically, as market research becomes more a part of the procurement process, it will improve acquisition planning and make the acquisition more efficient by improving forecasts of contractor behavior. The initial investment of time and energy may be too high, however, unless additional personnel are assigned to the buyer billets. (Mulhern, 1989; pp. 7-7)

Third, a matrix approach could be utilized. A matrix structure contains a core organization which is supported by, and coordinates the efforts of preexisting functional groups toward an express goal. This structure permits an organization to exploit the research expertise of a small market research staff, and the market sector and contracting expertise of full time buyers. Here an organization should experience essentially a combination of both the benefits and the drawbacks of each of the previous options, merely to a lesser degree. (Yoder, 1993; pp. 35)

A fourth approach is the establishment of an advocacy organization. A market research advocate function could be established at Headquarters, Marine Corps (HQMC), possibly as a separate office, but more likely as part of the duties of the Marine Corps' Competition Advocate. Advocacy functions could also be assigned at lower levels. The establishment of an advocate attracts attention to the function, especially if it is sponsored at a high level. Advocates, however, by definition should be outside the normal procurement chain of command. This insulates them from the schedule pressures placed on the procurement process. It also allows for the

persuasive power of a threat of appeal to the powerful sponsor, should contracting personnel disagree with the advocate too strenuously. Establishing such an advocacy bureaucracy, however, requires significant investments in manpower to staff the organizations, which may eliminate it from the feasible range of options. Furthermore, such an organization is probably only cost effective at high levels, such as HQMC, or at the Systems Command level in the Navy, by comparison. (Mulhern, 1989; pp. 7-9 to 7-11)

2. Information Sought

So what information do "market researchers" look for? Any information which is likely to further the goal of improving procurement decisions is sought. The research objectives can be highly dependent on each particular procurement, or can be inquiries regarding market wide conditions. As has been discussed, one of the main purposes of conducting market research is to discover new potential sources of supply. Hopefully, enough bids or proposals will then be submitted and, thus, reduce or eliminate the need to conduct more in-depth market research. Therefore, companies with the capacity to produce a product or service fulfilling the Government's requirements will be sought. Also, information about the existence and availability of any products or services which may assist the Government in defining, or refining the definition of their requirement may be sought as well. Appendix A provides a listing of information elements one might seek through market research.

3. Sources of Information

The sources of information are also numerous. Again, the particular objective of the research may dictate what sources to consult. They may include catalogs, trade journals and industrial advertising, trade directories (such as Thomas Register), sales personnel, buyer's personal experience, trade shows, automated sources, National Association of Purchasing

Managers (NAPM) publications, various U.S. Government departments' publications, university publications and research writings, commercial market (and marketing) research firms or consultants, responses to draft solicitations and Requests for Information (RFI), etc. (Leenders, 1985; pp. 516-518). Any source which may reveal pertinent information regarding the market or a particular solicitation is worth investigating if resources permit. Appendix B lists several potential sources of information a researcher may wish to consult.

4. The "Stewart" Model for Market Research Program

An effective market research Program will consist of five major elements. The first is a logical process for the selection of market research projects. These selection criteria will be the result of a careful evaluation of the estimated benefit to be gained from the research weighed against the resource constraints present. Resources are few, and research projects are many, so a means of selecting the projects to be completed is vital. Proper use of appropriate research and analysis techniques is the second element. Researchers must be proficient in those skills necessary to uncover and evaluate the needed information. Appendix D lists many techniques one can use for market research, along with their applications and potential impacts. The third element, a methodical approach, must be used to lay out the information in an orderly and organized fashion and evaluate it systematically. Fourth, the information must be timely, or current, in order to be of use. Fifth, the information must be communicated to buyers in a timely manner and in a usable, readily digestible format. (Stewart, 1987; pp. 40-44)

The market research process is also characterized by four major phases. During the "Requirements Definition Phase," the nature and the scope of the information needed is developed. The selection criteria are used to evaluate the expected value

of proposed research projects. During the "Planning Phase," determinations are made regarding the type of data required, the collection methodology, and analysis tools or skills required. The "Collection Phase" is simply the period during which the data are collected from various sources using the aforementioned research methodology. During the "Analysis and Interpretation Phase," the data gathered are transformed into information usable in the decision making process. (Stewart, 1987; pp. 55-66)

5. Barriers to Effective Market Research

Yoder lists several major impediments to effective market research. One key barrier is organizing around, or restricting research to, geographical boundaries. This unnecessarily excludes potential suppliers who don't happen to be located in the applicable region, but who may be more than able to satisfy the requirements at a competitive price. Another impediment may be the diversity of products and services procured. It is very difficult for a buyer or researcher to master any one market sector when they are typically responsible for buying in as many as 10 to 15 commodity areas. Lack of understanding and commitment by top management is another key barrier to effective market research. Despite the statutory and regulatory requirements, until recently, little if any guidance or research in the area of market research has been undertaken. Also, because it is often difficult to attribute specific gains to a given market research endeavor or project, the subject has received little emphasis or concern. Another significant hurdle is the lack of effective Management Information Systems (MIS) available to contracting officers and researchers suitable for market research purposes. Most databases or information systems available are designed for other purposes, and only marginally useful in market research efforts. (Yoder, 1993; pp. 48-69) One significant hinderance is the restrictions placed on the

Contracting Officer by Socio-Economic Laws. For example, when a procurement is designated as a small business set-aside, the buyer will not normally consider any large businesses and will focus his market research efforts on the small business sector. A larger list of potential impediments is listed in Appendix C. Perhaps the most significant barrier is the apparent lack of manpower available in the field contracting activities. Market research requires time and people. It is very difficult to expect already overburdened contracting personnel to adequately perform additional duties, especially when the cost-benefit relationship is not clear. (Irick, 1994)

F. SUMMARY

In the increasingly fiscally austere environment, the acquisition process must be able to procure high quality and reasonably priced goods and services quickly. The Nation can no longer bear the exorbitant overhead cost of operating the current system. Market research is one commercial practice which can be utilized to reduce the cost of procuring supplies and services. Furthermore, with the current policy of procuring commercial items instead of Government unique items, market research must be employed to survey industry for commercial solutions to the Government's requirements shortfalls. Market research can result in improved competition and provide the Contracting Officer with valuable information for negotiations, plant surveys, and bid and proposal evaluations. Market research has potential to produce significant cost savings. Armed with a thorough understanding of pertinent markets, Government buyers can ensure they make optimal procurement decisions.

III. THE STATE OF MARKET RESEARCH

In this chapter, the significant results of surveys sent to all field contracting activities, interviews, and conversations are discussed. Over twenty-five survey responses were received from the Contracting Officers and senior contracting personnel at various Marine Corps field contracting activities. The survey was not intended to provide scientifically precise statistical data, but to provide a more general understanding of the environment in which contracting personnel in the field operate, and the potential to effectively employ formal market research techniques. Dozens of telephone interviews were conducted as well. The discussion which follows, unless specifically noted, comprises a synthesis of the results of both of these sources.

A. UNDERSTANDING OF MARKET RESEARCH AND ITS BENEFITS

Survey respondents and interviewees demonstrated a general understanding of what market research is and what benefits it could yield. Most have acquired this understanding through education at the Naval Postgraduate School, Defense Acquisition University (DAU) courses, or through experience or their self-education.

1. Classification of Products or Services Being Procured

When presented with the statement *"The classes of products and services procured have little bearing on the degree of market research you conduct or the market research techniques you utilize"*, a full 62% either "disagreed" or "strongly disagreed". Respondents recognized that several factors affect the amount of research required and the techniques used. The classification of the goods can indicate what measures a buyer or researcher should take in order to ensure he acquires the information he needs to make an optimal procurement decision. Career buyers usually develop a vast

knowledge of, and often keen intuition in, the commodity areas within which they purchase. When presented with a procurement, they classify it based on their experience and understanding of the nature of the item and make a conclusion regarding what market research efforts, if any, must be undertaken (Brothers, Irick, and Pockette, 1994). In many situations, this mental assessment may be sufficient. However, it relies solely on the expertise and mental acuity of the individual buyer.

Edward Sheehan, in his 1992 Thesis "*A Taxonomy of Goods Procured by the Federal Government*", developed a classification model for goods, which is a refinement of work done by previous researchers. It describes 12 product characteristics which can be used to classify goods (Figure 1). A product could be ranked from 1 (low, in "complexity" for example) to 5 (high). The characteristics were narrowed to those in bold type in Figure 1. Sheehan then suggests that these characteristics can be used to classify goods, and that these classifications can begin to indicate what market research techniques and sources should be utilized, depending on where a product fell on the scale for each characteristic. This taxonomical treatment could be very useful to buyers if further developed. Once a product is graded according to each characteristic, the resulting score could point to recommended research techniques, or at least indicate the level of research which ought to be pursued. (Sheehan, 1992; pp. 26-39) Of course, merely scaling the characteristics may, itself, require significant market research.

2. Understanding the Benefits of Market Research

When presented a list of 11 potential benefits of conducting market research (Appendix E, question 5), the vast majority of respondents indicated that they agreed or strongly agreed that formal market research activities could yield such gains. All agree that market research must be done to ensure enough qualified vendors are given the opportunity to compete

for a contract, and to determine price fairness and reasonableness. On most procurements, market research activities are normally conducted to compare prices, identify potential sources, and investigate various products.

Market research can assist engineers and technical personnel (normally the Contracting Officer's customers) to write better specifications and statements of work. General market knowledge gained through market surveys can help technical personnel in determining what products, services, concepts, or processes may be available to fill a particular need. By understanding how private industry satisfies its own

- Change (rate of)
- **Complexity** (technical intricacies)
- **Customization**
- **Maintainability**
- Homogeneity
- Consumption (rate of)
- **Unit Cost**
- **Documentation** required
- **Item attention** (mass quantity or single item)
- Sources of Supply
- Criticality
- Stability (of market)

Figure 1; Product Characteristics
(Sheehan, 1992; pp. 29-32)

similar needs, the technical customer can gain insight into improved ways to fill Government needs. (SD-5, 1992; pp. 5-6)

The challenge for the Contracting Officer, and his personnel is to ensure that the requiring activity conducts sufficient independent market research, whether formal or informal. This can be done by examining the requirer's cost estimate as well as determining the source of it (often one particular vendor), examining the specification or Statement of Work (SOW) for restrictive language or detailed design requirements, and by maintaining open communication with the requirer. Contracting offices regularly serve highly trained

and educated customers knowledgeable in their disciplines and in the markets that serve them. There are, however, as many customers who submit requirements to the contracting offices on an irregular basis, who are not proficient in specification or SOW writing (Durkin, 1994). The contracting officer must, at a minimum, ensure that they submit their requirements in the broadest performance or functional terms. Furthermore, despite the technical knowledge of the regular customers, or perhaps because of it, many interviewees indicated that one of their biggest problems was the submission, by some customers, of detailed design specifications or requirements with other restrictive language. These would hinder full and open competition, if included in a solicitation, because very few vendors (perhaps only one) might be able to perform to such confining specifications. Consequently, many must be rewritten by contracting personnel. Several interviewees indicated a desire to have many of their customers better educated in specification and SOW writing, and in market research in general.

B. PERCEIVED NEED FOR MARKET RESEARCH

As discussed above, most respondents and interviewees recognized the need for improved market research for requirements determination and refinement. In the procurement arena, nearly 44% of respondents either "agreed" or "strongly agreed" that market research efforts beyond those normally utilized were necessary. During the interviews, however, most indicated they believed they were meeting the regulatory and legal requirements, but that more market research would probably help. However, as will be discussed below, the research methods would have to be very efficient; the benefits would have to outweigh the costs of conducting the market research.

C. INFORMATION SOURCES USED

1. Bidders Lists

The most often used source for market research-related information within the Marine Corps Field Contracting community is the established bidders list maintained by each office. This is essentially a list of companies who have had contracts with the office before, or are interested in possible future contracts and wish to be sent solicitations for particular commodity or product procurements. Therefore, it will merely provide a list of potential suppliers. Sixty-seven percent of respondents of the survey indicated they employed their bidders list greater than 60% of the time as a source of potential bidders or offerors. These lists are certainly a valid starting point when preparing to solicit. They often contain companies which are well-established in their industries and capable of providing the required products or services. However, a heavy reliance upon them could result in the soliciting office excluding as yet undiscovered (or merely unregistered), but certainly capable companies.

2. Vendor as a Source

The next most often used sources of information were provided by interested vendors. For example, approximately 62% of respondents utilize vendor catalogs, advertising literature, and other publications over 60% of the time. There was also significant use of vendor sales and technical personnel. Prospective suppliers are legitimate sources of information. The risk is relying too heavily upon this information which may be biased when provided by the vendor himself. Obviously, the vendor must be investigated to determine whether or not he can fill the Government's requirement, as well as receiving a price quote for price comparison purposes. Information received from the vendor must

be validated by comparing it to the information received from other vendors, the information gained from all other sources, and by evaluating it in light of the buyer's knowledge of the sector or market in general.

3. Yellow Pages and Trade Publications

The next most often used source was the Yellow Pages. About 33% of respondents stated they used the Yellow Pages over 60% of the time. Over 33% said they used them 41% to 60% of the time. A significant amount of the time, survey respondents stated they used trade newspapers, magazines, journals and other trade publications, as well. These are legitimate sources, normally used to initially identify potential vendors. They are, however, advertising designed by the vendors and may not provide much reliable information beyond the name and telephone number of the vendor. Use of such sources is a good beginning, but requires further in-depth research into each vendor.

4. Infrequently Used Sources

All of the aforementioned sources are legitimate and do provide reliable information if investigated diligently. They have been used for years and have provided field buyers with information at least sufficient to meet competition and "fair and reasonable" price requirements. Perhaps more enlightening, however, is the multitude of sources used infrequently, most of which could prove very useful and cost effective. The aforementioned potential sources of information are but a few of the twenty-six offered on the survey questionnaire. The remainder were utilized very rarely or infrequently; generally less than 20% of the time. Those few which were used are "potential source" centered information sources; generally used merely to find capable suppliers for a specific procurement. They may provide little useful independent information to validate a vendor's ability.

Several other sources hold the potential to provide valuable information, whether for a market investigation or for market surveillance. Among these are Department of Commerce publications, other Federal agency publications, corporate annual financial reports, foreign government representatives and other foreign sources, and various university research work and publications. Surprisingly, according to the survey responses, inquiries to other Government contracting activities are relatively infrequent. Most interviewees, however, did demonstrate that they often communicated with other Government activities to gather information and advice. Other contracting activities may be one of the richest sources of information regarding contractor past performance, market research techniques, lessons learned, and sharing of other market research information.

a. Commercial Marketing Reports; Dun and Bradstreet

HQMC, Field Contracting Support Branch (Code LBO) has contracted with Dun and Bradstreet (D&B) to receive reports on an "as requested" basis. For a basic annual fee of \$300, contracting offices, via LBO, can call for up to 100 reports on specific companies or on market sectors in general. When the field contracting offices use the D&B reports, they are used almost exclusively to investigate particular companies in order to help assess a company's responsibility or competency to perform on a given contract. Occasionally, when the Small Business Administration (SBA) issues a Certificate of Competency to a company of questionable abilities, the D&B report of the company may be used to challenge the SBA decision. Dun and Bradstreet maintains several databases, some with information on up to 8.6 million U.S. companies with ten or more employees. Information available may include company name and address, telephone numbers, names of senior executives, type of business, parent

and subsidiary companies, Standard Industrial Classification (SIC) codes, principal products or services produced, sales volume, and other financial information, and pending civil or criminal actions or convictions. This information can be quite valuable in evaluating a company and its bid or proposal. Additionally, D&B provides market research and analysis reports which could be very useful in surveying an industry. D&B also provides information on hundreds of thousands of foreign firms, as well. While utilization statistics were not available, most interviewees stated that they had never or rarely used D&B reports.

b. Automated Information Sources

Corporations are utilizing automated marketing and purchasing research databases in ever increasing numbers. These services provide rapid access to timely information which can aid them in critical decisions in an increasingly challenging market environment. The rapid pace of industrial changes and economic developments requires timely and accurate information for executives to make prudent strategic business decisions. Between 1975 and 1992, the number of databases has increased from 301 to 7,907, or by a factor of 26! Database publishers have grown by a factor of 15 in the same period; from 200 to 3,007. Database records have increased by a factor of 87; from 52 million to 4.527 billion. Growth in online database use for databases on the major U.S. systems increased from 750,000 searches per year in 1974 to 44.4 million searches per year in 1992. The 1993 edition of the *Gale Directory of Databases* contains contact and descriptive information on some 8400 databases, 3260 producers, 825 online services, and 840 vendors of database products. Volume 2 profiles more than 3200 database products offered in "portable" form (CD-ROM, Diskette, etc.). (Marcaccio, 1993; pp. vi-xx) This phenomenal growth in the database industry attests to the interest in, and importance of, real time

access to information. Over 76% of survey respondents said they never used any commercially available online automated market research oriented services or other automated systems.

The Gale Directory lists hundreds of databases in advertising and marketing, products and vendors, management, U.S. Government, research reports, as well as individual industrial sectors. The connection costs for online access vary from a few dollars per search to nearly \$200 per hour. Many of the most useful databases can be accessed through subscription to one of the major online service companies such as DIALOG Information Services, Mead Data Central, or ORBIT Search Service. Subscription to such a service holds significant potential for providing market research information quickly and inexpensively. Databases of interest include such notables as Dun and Bradstreet (36 databases), Dun's Marketing Service (30), and Thomas Register (3).

D. MARKET RESEARCH TECHNIQUES UTILIZED

1. Procurement History

Nearly half of respondents indicated that when preparing for a solicitation, over 60% of the time, they analyzed their procurement history with regard to quality, degree and nature of competition, prices, and performance histories. It seems reasonable that this is an activity which should be done on all procurement actions. The survey respondents, however, are likely including all small purchase actions for which little formal consideration is given with each action. Such actions are normally ordered against a requirements contract or a Blanket Purchasing Agreement (BPA) for which all such research should have been done prior to award. Such analysis involves examining the nature of competition on previous procurements, how vendors responded to solicitations, how competitive the price bids have been, evaluating the quality of the products or services received, and assessing the relative overall

performance of vendors. The value of this technique is that previous shortcomings can be uncovered. For example, if relatively few vendors have been responding to solicitations for a particular commodity or service, perhaps there is a problem in how the Statement of Work (SOW) or specifications are written which dissuade vendors from participating. Or perhaps the contract type needs to be revised. Such research and analysis can lead to improved procurement decisions, resulting in increased competition and lower costs.

2. Other Techniques

Searches of the Federal Supply Schedules were utilized by nearly half of the respondents more than 60% of the time. This is often the first technique utilized because if there is a source on these schedules, Government buyers are normally required to utilize them. Listed sources normally provide favorable prices and terms.

3. Trade Directories

Also examined moderately were business and trade directories such as "Thomas Register" and "MacRea's Blue Book". Thomas Register, for example, contains information on more than 153,000 U.S. and Canadian manufacturers and providers of service. For each company, it provides the name, address, contact numbers, a description of the company, product brand names and trademarks, and Standard Industrial Classification (SIC) codes. For some companies, it includes asset rating, exporter status, number of employees, cable address, company executive names and titles, and names of parent and subsidiary companies. It covers more than 50,000 product classifications and 112,000 trademarks or brand names. (Marcaccio, 1993; pp. 816) These and similar registers can be superb sources of information, especially when searching for potential suppliers or when investigating products which might fill a particular need.

4. Infrequently Employed Techniques

Never used or infrequently used techniques included attending industry conferences and conventions. Such conventions can be a valuable source of information regarding vendors and products. It is as important to have the appropriate technical requirements personnel attend, as it is to send contracting personnel. (SD-5, 1992; pp. 6)

Although it was not well-defined in the questionnaire, respondents indicated that they very rarely conducted a full market investigation. Instead, their market investigations tend to be informal and mostly for the purpose of source identification to satisfy the competition requirement for given procurements.

Almost 62% said they never conducted industry briefings, nor did they contact potential contractors to discuss requirements and get recommendations regarding planned acquisitions. Such communications can be used to inform interested vendors of planned procurements and issues which may impact them. They enable vendors to begin bid preparations, and get the industry involved early, providing an opportunity for Government personnel to learn more about a market's producers, products, and services which may fill a specific requirement.

Also substantially under-utilized were advertising in trade journals, inquiries in Government databases such as PASS and PMRS, and utilization of commercial research firms. Trade journals provide a relatively easy way of publicizing a solicitation. Most Government databases are of limited use because they were designed for other purposes and only contain data regarding previous contracts and contractors. Finally utilizing commercial firms to conduct research for the Government probably violates Contracted Advisory and Assistance Services (CAAS) contracting restrictions, since

acquisition personnel are required to conduct market research by law.

E. MARKET RESEARCH FOR INCREASED COMPETITION

Question 3 on the survey addressed the question of competition. Over 50% of respondents indicated that they expected ten or more bidders or offerors in between 21% and 60% of their actions (question 3.a.). Nearly 48% responded that more than 60% of their procurement dollars were spent in highly competitive markets. Essentially, the same results were reported when asked how often they expected between five to ten bidders or offerors. Contracting Officers expect two to five bidders about one third of the time, and the vast majority of respondents indicated that less than 20% of their actions were non-competitive. In telephone interviews, most contracting officers indicated that in most of their actions they had at least three bidders or offerors, and usually up to five or six. Reports for fiscal years 1993 and 1994 from the Procurement Management Reporting System (PMRS) indicate that fewer than three percent of all procurement actions were not competed. (PMRS Report DF52CNEW, 1994). In the view of most respondents and interviewees, having two or more responsive and responsible offerors or bidders, accompanied by price analysis, ensures a fair and reasonable price.

How much competition is enough, though? How many bidders or offerors, or how many producers of a given product are needed to ensure the buyer is getting the lowest price? Perfect competition is said to exist when there are a very large number of buyers and sellers, the products traded are homogeneous, buyers and sellers have full knowledge of the market (perfect information), the buyers act rationally, and there are no barriers to market entry or exit. Only then will market equilibrium between supply and demand produce the optimum clearing price for a good. There are, however, very

few market sectors which could be considered to exhibit the characteristics of "perfect competition". Most markets fall into a category of imperfect competition characterized by few sellers (oligopoly) or many sellers producing many *differentiated* products. Competition among producers (sometimes fierce competition), however, is generally considered sufficient to yield optimal prices. (Dobler, 1990; pp. 242-243)

A level of competition deemed adequate to provide substantially the same benefits as perfect or near perfect competition (*effective competition*) is considered to exist when:

- At least two offerors submit bids/proposals,
- These offerors can satisfy the Government's requirements,
- Offerors can independently contend for a contract,
- Offerors submit priced offers responsive to the stated requirements of the solicitation. (ASPM, 1986)

Virtually all procurement actions executed by the Marine Corps field contracting activities meet these standards (PMRS Report DF52CNEW, 1994). Survey responses and interviews indicated that most products purchased are produced by many companies and are relatively undifferentiated. They are easily defined by the contracting personnel or the requirers because they are usually common items used by numerous businesses and organizations to satisfy the same or similar needs exhibited by the Government. Therefore, market research conducted to identify products and vendors to fulfill these needs is generally brief and very informal since a good general, or "common knowledge" of such items is already possessed by buyers and requirers. Consequently, buyers believe that because such items are so common and there are so many

producers, that competitive forces have lowered the prices as far as possible, and any market research conducted will cost more than the marginal benefits it will yield.

F. MARKET RESEARCH FOR REQUIREMENTS DETERMINATION

Effective market research can assist a researcher in determining whether or not commercial products or services exist which can satisfy a Government need. Market investigations can be conducted to search the marketplace for these products. Furthermore, continuous market surveillance can provide a solid background knowledge and understanding of pertinent market sectors and product characteristics and the capabilities of various producers. With this knowledge and understanding, the Government increases the likelihood that a commercial product will be discovered to fulfill requirements.

As discussed above, the majority of purchases are for common items, for which there is "common knowledge" among the vast majority of contracting personnel, requirers, and the public in general. A classic example is office supplies. When a need exists to hold together two pieces of paper, it is generally known that one could purchase either paper clips or a stapler. The existence and characteristics of these items are common knowledge since most people have everyday experience with them.

The use of market research to aid in the requirements definition and refinement process at the field contracting level is problematic. When a requirement exists which can not be satisfied by a product which falls into the parameters of the previous paragraph, market research becomes more difficult, more time consuming, but usually more necessary. Much of market research must be done by the requiring activity. These technical personnel are the experts in their field and must stay abreast of the latest developments which affect their industries. For example, the Director of a

Regional Automated Services Center (RASC), which is charged with control and oversight of most ADP assets and programs on a Marine Corps Base or installation, normally is quite expert in the latest industry improvements in hardware and software such as personal computers; mainframe computers; Local Area Network (LAN) equipments such as servers, modems, repeaters, and cabling; and office productivity software packages. RASC personnel normally know who the major producers of such products are, and what industry developments and innovations can satisfy needs they have on their base. Most interviewees, however, experienced problems with poor market research on the part of the requirer. While most were relatively adept at writing specifications and SOWs which were performance or functional in nature and did not restrict competition, many requirers stopped their research at the first product and source they found, virtually transposed that vendor's catalog description into their specification, and submitted it to the Contracting Officer. When this is discovered, the challenge for the Contracting Officer is to convince the requirer to do proper research, and to assist him as much as possible. (Various Interviews, 1994).

G. PERCEIVED BENEFITS OF ELECTRONIC DATA INTERCHANGE (EDI)

Survey respondents and interviewees believed that the introduction of Electronic Data Interchange (EDI) would provide significant opportunities to improve market research. As discussed previously, there is a wealth of information available online through thousands of databases and directories. These can be accessed through subscription to one of the major information services such as DIALOG. Establishment of electronic postings of actual and planned solicitations could significantly increase the number of companies that become aware of these procurements. Such postings could initiate communications between the Government

and interested vendors which result in less restrictive solicitations. Early industry involvement can be crucial in many procurements, and EDI should assist in this.

H. MARKET RESEARCH ABILITIES

When presented a list of several analytical processes that a researcher may utilize in the market research process (question 10, Appendix E), most respondents and interviewees indicated they were extremely confident that they and their contracting personnel could successfully undertake most of them. Among those skills of particular concern are assessing the reliability, capacities, and capabilities of potential sources of supply; assessing the impact of trade developments on supply, demand, cost, and prices; evaluating quality of products or services; analyzing cost and price trends; and evaluating the financial health of potential sources. For example, over 90% of respondents either "agreed" or "strongly agreed" that they and their contracting personnel could successfully assess the reliability of potential sources of supply. Over 61% either "agreed" or "strongly agreed" they could analyze the demand for a product or service by their customers. Fifty-seven percent "agreed" that they could adequately assess the quality of a potential contractor's products or services.

I. IMPEDIMENTS TO EFFECTIVE MARKET RESEARCH

Several impediments to instituting effective market research can exist in any organization, despite the best intentions and efforts by managers and workers. Among those impediments that respondents believed were critical in Marine Corps field contracting, 81% either "agreed" or "strongly agreed" that personnel strength was their greatest barrier. Effective market research takes time, and in the case of unusual requirements, it may take a seemingly inordinate

amount of time. Most interviewees estimated they would need at least two more mid-grade employees to have a formal, regular program. They could then have a small dedicated staff of researchers, augmented on an as needed basis by regular buyers.

Several other impediments of note are experienced by Marine Corps field contracting activities. Eighty-six percent either "agreed" or "strongly agreed" that their current contracting workload prevented them from undertaking more market research activities. This is, perhaps, testament to the burden placed upon contracting activities by restrictive laws and regulations, and the accompanying bureaucratic implementation policies. To add to this, a large majority indicated that their non-contracting work load, or collateral duties, significantly hampered their efforts. Many Contracting Officers must carry on a number of staff duties, while active duty Marines must meet annual training requirements which keep them away from their primary duties. This decreases available time, as well as disrupts work flow and can cause a loss of learning. Many respondents also expressed concern over training availability. While the Defense Acquisition University (DAU) is continually increasing the courses it offers, several of which apply to market research activities, it is often difficult to send personnel due to workload and operational commitments such as general military training and deployments. The DAU, however, does provide travelling training teams which can go to bases to conduct requested classes. Two thirds of respondents indicated that the lack of automation was a significant impediment as well. As discussed earlier, the potential of automation in this field is enormous. Computers, as they have always been, could prove to be a great force multiplier, providing a level of access to information and analyses that has been previously denied. Considering the shortage of personnel and lack of sufficient

time available to conduct effective market research, automation is an essential element. It promises to be a very cost effective tool.

J. SUMMARY

This chapter has examined the current state of market research within the Marine Corps field contracting community. Contracting personnel have a reasonable understanding of what market research is and what benefits it could yield. They realize that the class or type of products being procured certainly affects the degree and techniques of market research used. Common items require less market research, and the more complex or unique items require more. They understand that effective market research can deliver increased competition resulting in lower prices, and improved requirements definition through enhanced understanding of the commercial market place and the products, services, and vendors available. Survey respondents and interviewees were confident in the abilities of their personnel to undertake market research activities when necessary. For the most part, they agreed that improved market research efforts would probably be cost effective on large dollar procurements for extraordinary items. They believed, however, that the costs of undertaking such efforts for low dollar, common-item procurements would generally exceed the benefits gained. They felt competition was sufficient to achieve the lowest practical prices available.

Information sources used are generally limited to established bidders lists, various vendor personnel or publications, and Yellow Pages or trade publications. Sources which hold considerable promise include the increased use of automated sources such as online databases and bulletin board systems, and commercial marketing report services such as Dun and Bradstreet Information Services. These alternatives could

prove very cost effective overall. Attending trade conventions and conferences, increased use of market surveys, broader advertising of solicitations and planned and draft solicitations, and industry briefings, are market research techniques which are underutilized and hold significant potential.

Using market research as a tool for requirements determination or refinement is understood to be very important. There are still problems ensuring that requiring organizations perform sufficient research or seek the aid of the servicing contracting office.

Current and planned EDI initiatives hold significant promise in the area of market research. Rapid access to information and electronic communications between contracting offices and private industry will increase the visibility of the Government's requirements and ease the search for information.

Finally, several barriers to effective implementation of formal market research efforts exist. Principal among these are insufficient manpower, contracting work load, collateral duties, and insufficient automation and electronic connectivity.

Market research is being conducted. It occurs when a buyer compares prices or acquires competing quotes, when a requirer searches for producers of products to fill the Government's needs, and when contracting personnel collect information needed to evaluate bids or proposals. For the most part, the amount of market research is sufficient to meet the fundamental requirements of CICA and the FAR, but there are areas which could be improved.

IV. THE REQUIREMENT VERSUS THE CURRENT STATE

For a Market Research Program (MRP) to be effective in Marine Corps field contracting, it must fulfill the information needs of the field offices, it must adequately surmount the existing impediments to effective implementation, and it must satisfy the legal requirements to conduct market research, as set forth in CICA and the FAR. This chapter will examine the degree to which market research, as it is currently undertaken in the Marine Corps field contracting environment, meets the legal requirements as well as the practical requirements of the users.

A. MEETING THE LEGISLATIVE AND REGULATORY REQUIREMENT

As discussed in Chapter II, market research is a requirement levied upon procurement officials by the Competition in Contracting Act and the Federal Acquisition Regulation. From the perspective of a contracting officer or specialist, the most pressing purpose of market research is the search for additional potential bidders or offerors. This is largely because of the legal and regulatory requirement to ensure full and open competition. Once the requirements of competition have been satisfied, however, further market surveillance or investigation is often abandoned to attend to more urgent matters.

As has been discussed, source discovery is only a small part of what can be gained through market research. The truly lucrative gains will only be realized when one has a comprehensive understanding of the markets within which he buys (Stewart, 1987; pp. 31-32). Only then can a buyer ensure that he has uncovered and exploited every bit of information available in order to make the optimal purchasing decision. No buyer, however, can know everything about a given market, especially since markets are in a state of perpetual, and

largely unpredictable change. Only a buyer who specializes in one market can hope to come close to this level of market knowledge and understanding. In Marine Corps field contracting, however, there are no market specialists. Most buyers are assigned to at least a half dozen commodity areas they must buy in, thereby dividing their attention. In addition, buyers are often rotated to other commodity areas periodically, to increase the breadth of their experience. Lastly, duties of a more urgent nature often prevent them from engaging in market research activities. (Brothers, 1994)

When purchasing routine and simple products which are in wide general use and for which there is a broad and general common knowledge, however, the need for acquiring more information is low. Any effort to increase one's knowledge in the area will likely be more costly than the value of the information it produces. These types of items are widely available, and simple price comparison will most likely yield the lowest practical price to the Government. Consequently, with regard to the vast majority of products or services procured at the field contracting activities, the Marine Corps appears to be satisfying the basic requirements of CICA and the FAR. (Various Interviews, 1994)

During procurements for more complex items, or products purchased in volatile markets, more market research is required to determine sources, availability and capabilities of existing systems, economic and technological trends, quality standards, etc. For such procurements, contracting personnel do increase their research efforts. The research is normally informal and evidenced by little or no documentation. It relies on the business acumen and research abilities of the contracting officers or contract specialists. Normally, however, they work with the customer, who is usually more knowledgeable in the technical aspects of the industry, to discover potential solutions to their requirements. Most

contracting officers and personnel interviewed realized they needed to work with their customer to first understand the requirement, and then to help them write an adequate specification or Statement of Work. Requirements definition or refinement is a major purpose of market research. The requirers must conduct research, with the help of the contracting office if necessary, in order to find existing products or concepts which can satisfy their requirements. Contracting personnel recognize that only with the customer's participation, can they discover and deliver what is needed. For the most part, such market investigations are being done. Therefore, the Marine Corps field contracting community is meeting the basic requirements of the law in that market research is, indeed, conducted whenever an information deficiency is recognized. The market investigations to satisfy specific, momentary informational deficiencies, however, are normally relatively limited, leaving room for improvements, providing existing impediments are removed or diminished. (Survey, 1994)

B. SATISFYING REAL INFORMATION REQUIREMENTS

1. Common Requirements

Within the Marine Corps field contracting community, typically less than three percent of all actions are non-competed procurements. These actions account for less than nine percent of the procurement dollars spent by the field contracting activities. For formal contracting actions (those over \$25,000), typically between 10% to 13% of the actions and procurement dollars are not competed. (PMRS Report DF52CNEW, 1994). Based on the survey responses and interviews, at least 85% to 90% of all items purchased are of a commercial nature, normally sold in large quantities to the general public or industry. Very few procurements are for military, or Marine

Corps unique items.² In most cases, contracting offices have no problem achieving competition sufficient to ensure a fair and reasonable price based on free market forces of supply and demand. Consequently, market investigations on the vast majority of actions are not required to ensure acceptable competition.

With regards to requirements determination, the situation appears to be similar. Again, the vast majority of requirements are for easily defined, and widely available products. It is generally simple to find ample suppliers in the local area. Accordingly, little market investigation is ever required for such commodities.

As previously discussed, however, the contracting personnel interviewed did report some dissatisfaction with the specification and Statement of Work (SOW) writing abilities of the requirers. Requirers often failed to diligently search the marketplace for products which would fulfill their need. They often stopped their search once the first suitable product was discovered, or would just as often submit specifications basically copied from the description of a preferred product. These practices were not rampant, but occurred frequently enough that several contracting officers saw fit to express concern. (Survey and Interviews)

2. Exceptional Requirements

It is when the need to fill extraordinary requirements occurs, or when contracting personnel recognize a significant information shortfall, that increased market research activities are called for. The survey respondents and interviewees demonstrated a good understanding of this relationship. When an unusual requirement is submitted, the

² The exceptions to this general statement are the Marine Corps Logistics Bases at Albany, Georgia, and Barstow, California. The missions of Contracting Directorates there are to support wholesale supply and Depot level maintenance efforts. Purchases for industrial tooling equipment, raw materials, and militarily unique maintenance parts are common. However, their base support contracting sections are essentially separated from the rest of their procurement activities, allowing for easier comparison there.

contracting personnel normally first attempt to acquire an adequate understanding of that requirement from the customer. They then conduct market investigations, along with the customer, to identify possible products and sources of supply, if none are immediately identifiable. Market investigations are conducted any time one experiences a particular informational deficiency. This is normally in response to an immediate, specific procurement action. Its purpose is to determine, with a high degree of confidence, whether or not there exist any products which are reasonably likely to satisfy a specific mission need (SD-5, 1992; pp. 9). When requirements arrive for items or services for which a buyer is unfamiliar, he knows he must acquire market information to satisfy competition requirements and to more fully understand what might be available to satisfy the particular mission need.

C. THE NEED FOR IMPROVED MARKET SURVEILLANCE

For the most part, market investigations are conducted when they ought to be. Market surveillance, however, appears to be conducted rarely by most activities. As was stated in Chapter II, understanding the commercial marketplace is essential to ensure, with a high degree of certainty, that Government buyers are able to acquire products or services which meet the needs of the requirers at a fair and reasonable price. While it is true that experience provides a certain degree of understanding of particular markets, that understanding comes from only incidental contact with the market and should not necessarily be regarded as expert. Merely being a specialized buyer, of which there are few in the Marine Corps, may not make one an expert. It is experience, combined with continual and broad surveillance of the market, which can truly contribute to a profound understanding. The Armed Services Pricing Manual states:

The idea that competition results in fair prices must be viewed as a truism and not a fact. The fact that many companies are asked to propose does not mean that each has an equal chance of winning the competition. The fact that several do propose does not mean that the price of the low offeror is fair. The virtues we ascribe to competition, are those that exist under conditions of perfect competition, when supply and demand are in a state of equilibrium. They hardly ever are, particularly in the markets for military goods and services. (ASPM, 1986; pp. 2-5)

The only way a buyer can have any employable understanding of such market conditions is through ongoing market surveillance. How can a buyer know or suspect that a requirer's specification is overly restrictive? How can a requiring activity have some conception of what might exist to fulfill his need? Continual market surveillance can provide at least a basic conception of what industry can provide. Market surveillance can provide a general sense of products available in the market, as well as their characteristics and capabilities. (SD-5, 1992; pp. 5-6)

As stated earlier market investigations normally need not be done for procurements for items that are procured in competitive environments. Most items are so common that mere price comparison is sufficient. It was also stated that the same is true in the requirements arena. However, a buyer can only be confident that a product is still "common" and that the competitive environment has not changed if he has a working understanding of the market. The requirer ought to be truly convinced that the usual "common" solution to his requirement is still the best option available. This can only be achieved through a heightened understanding of the market.

D. SUMMARY

Contracting personnel within the Marine Corps field contracting community are satisfying the elementary

requirements to conduct market research as defined in CICA and the FAR. Buyers undertake reasonable efforts to investigate markets in response to particular requirements or informational deficiencies. Most procurement actions are for common items widely available in competitive markets, and require little, if any, market research beyond basic price comparison. Exceptional requirements call for unusual market research efforts to determine product and supplier availability and capabilities, pricing information, and market comprehension. Improved market surveillance could furnish an understanding of markets which will either validate or challenge our assumptions about the commercial environment within which our procurement actions take place. Only then, for example, could a buyer realize that what he thought was a common item in a competitive market, was actually a specialized item sold in a less than competitive situation.

Considering the barriers they face, contracting personnel should be applauded for what they are able to accomplish. Market research within the Marine Corps field contracting environment, however, could be improved. The challenge is to encourage improvement, while removing the barriers to effective implementation.

V. MARKET RESEARCH PROGRAM IMPROVEMENTS

It has been demonstrated that market investigations occur as needed, and that they are usually sufficient to meet the fundamental requirements of the law and regulation. Also revealed was the fact that true market surveillance was not adequately conducted. How can market research in the Marine Corps field contracting community be improved? To answer this question, criteria for an effective program must be established based on the environment within which contracting personnel operate.

A. MARKET RESEARCH PROGRAM CRITERIA

An effective market research program for the Marine Corps field contracting community must meet four basic criteria. It must:

- Fulfill the legal and regulatory requirements for market research
- Satisfy the information needs of the user
- Eliminate or alleviate the effects of existing impediments
- Avoid onerous restrictions or requirements

1. Fulfill the Legal and Regulatory Requirements

As discussed earlier in this thesis, a degree of market research takes place in every acquisition action. It may be price comparison for a small purchase. Market research is conducted whenever a contracting officer gathers information to make a price reasonableness determination, or a responsibility determination. It is done in preparation for negotiations or evaluation of bids and proposals. It is also done to expand the competition for a procurement that was otherwise noncompetitive or where there were very few bidders or offerors. In this regard, the degree of market research

conducted within the Marine Corps field contracting community is sufficient to meet the basic requirements of CICA and the FAR. For the most part, however, these actions are market investigations, normally intended to satisfy an immediate information shortcoming. They do not contribute significantly toward the end of "understanding the market," a loftier requirement of the law, as discussed in Chapter II. Therefore, besides providing for improved advance procurement planning and increased market investigations, a market research program must enable effective market surveillance to elevate the level of market understanding.

2. Information Needs of Users

Buyers need usable, accurate, and timely information. The information must be applicable to the markets and products or services the user procures. Superb information is useless if it is late, just as poor information on time can be counterproductive. (Stewart, 1987; pp. 42) Market research takes time and, therefore, must be planned for in the procurement process. Market investigations add lead time to the procurement action they serve, while market surveillance requires time that ultimately detracts from individual contract actions. However, increased effective market surveillance should, ultimately, reduce the need for the number of market investigations since a better understanding of markets will provide the information that would otherwise be sought through investigations. It should also lead to improved procurement planning and market forecasts. Consequently, procurements should eventually take less time. (Mulhern, 1989; pp. 7-7)

3. Eliminate or Alleviate Existing Impediments

The barriers to effective implementation of Market Research programs within Marine Corps field contracting are formidable. They were detailed in Chapter II. Each must be considered and surmounted for a program to be effective.

The first barrier is time. Most sources said that if they were required to significantly increase and formalize their Market Research efforts, they would need many more man hours. Generally, they estimated they would need two to four more workers. The current work load experienced by most contracting offices will not easily allow effective expansion of Market Research. Exacerbating this situation, consider all of the military training requirements and collateral duties required of the active duty personnel. A Market Research Program (MRP) must adequately address this issue. It is not likely, given expected budgetary constraints, that contracting offices can expect increases in personnel (Lee, 1994). Therefore, Market Research efforts must be very efficient in their time consumption. As previously stated, effective market research should eventually produce an overall time savings. Market understanding will help customers define their requirements more quickly and will help contracting personnel identify, more quickly, suitable vendors who can deliver on time. But these savings cannot normally be easily associated with specific Market Research actions. Therefore, time efficient methods of data collection, analysis, and distribution must be employed for a program to be successful.

The next major impediment that must be overcome is the access to training. Training opportunities must be increased for both contracting and requirements personnel. Both must be able to utilize appropriate market research skills.

Finally, perhaps the most difficult barrier to overcome will be funding. It will be difficult to justify expenditures on market research efforts that may not demonstrate immediate savings. Therefore, a market research program should incorporate as many cost-effective measures as possible.

4. Avoid Onerous Restrictions or Requirements

Many interviewees and survey respondents cautioned against levying too many program requirements on the contracting workforce. One solution cannot fit every organization. Each organization faces a different set of circumstances with respect to manpower, customer demands, work volume, and regional market conditions. A program must allow flexibility and exercise of good business judgment. It must allow the contracting officers to decide when research projects are necessary, and to determine the scope and design of the effort.

B. PROPOSED MARKET RESEARCH IMPROVEMENTS

Following are several guidelines that, if applied, should improve the quality and quantity of market research.

1. Training

Training in the techniques and methods of market research is paramount, as is training on the writing of specifications and SOWs. Training can be looked at from two perspectives; internal and external.

a. External Training

Increased access to external sources of professional market research and analysis related training must be pursued. As a result of the Defense Acquisition Workforce Improvement Act, every acquisition professional must meet education and experience competencies specific to his or her position. The Defense Acquisition University (DAU), composed of a consortium of schools, offers education courses for each competency. Four courses currently offered deal directly with market research issues.

PQM 103; ...covers DoD management policies and procedures for development, preparation, and use of non-Government standards, commercial item descriptions, specifications, standards, and related documents in the acquisition process. The

course flow evolves from the identification of the requirement for the development of a document,....Emphasis is placed on "up-front" market analysis and commercial and nondevelopmental item alternatives. Subject matter includes commercial item descriptions; specifications and standards; stating requirements;... user feedback; and legal aspects of specifications.

PQM 104; ...is designed to provide instruction for personnel who use or review non-Government standards, commercial item descriptions, specifications, standards, and related documents in the acquisition process but are not involved full time in document writing (development) functions. The goals of this course are to ...provide guidance to document users on selection, application, and tailoring of specifications, standards, non-Government standards, commercial item descriptions, and related documents in the acquisition process. Subjects covered include communication between users/engineering office/standardization office, market analysis; stating requirements; ...user feedback; and requirements definition.

PQM 202; The Non-Developmental Item (NDI) Acquisition course focuses on tools and techniques for identifying and evaluating NDI alternatives throughout the acquisition process. The course provides instruction on addressing NDI during requirement definition, acquisition strategy development, acquisition, and support planning. It also introduces tools and techniques for selecting and preparing the appropriate technical requirements documents; commercial item descriptions; using multiple award schedules; and using market acceptability criteria, and lessons learned in NDI acquisition....

PQM 203; The Commercial Item Descriptions course presents instruction on the preparation and review of commercial item descriptions, including market analysis techniques to identify and characterize commercial items, the development and use of market acceptability criteria, and the development of performance-based salient characteristics. The course also provides current DoD policy on the use of commercial items and performance-based specifications. (DAU Hypertext Catalog, 1994-1995)

One competency necessary to meet the requirement of CON 104 is a demonstration of market research skills. It also covers skills such as evaluating specifications and SOWs, assessing and overcoming competition barriers, and selecting the contract type, all of which require market research. The competencies for CON 211 include acquisition planning, and analyzing market conditions. (Yockey, 1993; pp. 2-22) This training must be provided to requirements determination personnel as well.

The majority of interviewees indicated that they have trouble coordinating their employees' schedules with the course schedules. Furthermore, sufficient class seats have not been available. Although several courses are offered on-site, each class requires a minimum number of students (Deutch, 1993; pp. 8). This minimum is often difficult to meet. Therefore, contracting officers should coordinate with procurement activities aboard nearby installations in an effort to obtain enough students. If successful, students need not travel as far as they otherwise would.

Contracting officers must ensure that their personnel are provided all the formal education required of their positions. They must seek every opportunity to facilitate this. The Field Contracting Support Branch at HQMC should strive to improve the formal education opportunities for the field contracting personnel. Making the education accessible to the workforce is paramount. Sponsoring DAU courses at various Marine Corps sites is one option that could improve access.

b. Internal Training

According to the survey responses and interviews, besides formal education, contracting personnel acquire market research skills by means of on-the-job training and internal training. Many Contracting Officers and Directors of Contracting conduct regularly scheduled training, and several

indicated that they covered topics relating to market research. Such training was normally informal and resulted from recent incidents or experiences of participating personnel. Occasionally, they included topics dealing with market information discovered in a trade journal. The improved market analysis capabilities resulting from local training should greatly outweigh the costs of such training.

Local education programs must include topics dealing with market research. For example, one person or a small team could be assigned to instruct an upcoming training session. This topic could be a market research technique. The students could then be required to conduct research and instruct the rest of the office personnel in how this market research technique could be applied to pertinent procurements. Or they could be directed to conduct a basic market investigation into a specific aspect of one of the markets they regularly buy in, such as recent pricing strategies and trends, or why certain contractors do not respond to solicitations. By doing so, the assigned students not only learn about market research skills and techniques, they acquire useful market information and convey it to the contracting personnel who need it, thereby fulfilling two objectives.

Education in market research skills and the writing of specifications, and SOWs, must also be provided to a contracting office's customers. As discussed in previous chapters, many interviewees indicated that several of their customers were guilty of frequently submitting unnecessarily restrictive specifications. This was normally due to poor market research by the customer. Given their career experience and training, the customer is peculiarly situated to be the primary researcher regarding the technical solutions to his mission need. Contracting officers rely heavily on the customer's expertise in their field. The customer normally understands much better than the contracting personnel, what

can fulfill the Government's requirement. Therefore, beyond seeking formal educational opportunities for requirements personnel, the contracting officer should take it upon himself to provide pertinent training to his customers. Although this takes time initially, it will yield future dividends because customers will do much of the market research needed for a procurement, and will submit better, less restrictive requirements. Such internal education is relatively inexpensive and does not need to be excessively formal to be effective.

c. Self-Education

Self-education should be continually promoted. Such education may come in the form of college courses at local universities, or correspondence courses from participating DAU schools. It could be as simple and inexpensive as keeping up with the trade journals for the commodity areas a buyer works in. Studying the purchasing related journals should also be highly encouraged. These include "Purchasing," "Contract Management," and the "International Journal of Purchasing and Materials Management." These journals provide timely articles on developments in numerous markets and industries, many of which are pertinent to Marine Corps field contracting. They often include market trend analyses and report various indices on purchasing behavior and market conditions (Watkins, 1994).

2. Expand Access to Information

Market research information passes from one office to another via telephone, word of mouth, and to a lesser degree, by way of electronic mail (e-mail). Contracting personnel in one shop rarely hesitate to call another activity seeking advice and assistance with common problems. Such sharing of information should be encouraged. HQMC (LBO) and the field offices could, however, inexpensively improve the circulation of market information already researched by improving communication within the field contracting community.

a. Contracting Newsletter

This can be done, first, by means of the Contracting Newsletter published periodically by LBO. This is a readily available, easily produced medium. It normally reports the latest news in the Marine Corps field contracting arena. A section should be included where personnel with helpful information publish it to the rest of the Marine Corps contracting community. It could be information regarding a recently researched topic which has Marine Corps-wide appeal, or it could pertain to an information source. One contracting office could use it as a forum to highlight the success they have had in a specific market research endeavor. Articles could be submitted to the newsletter coordinator at LBO who would screen them to ensure they have broad appeal. This medium is uncomplicated and quite inexpensive. The time involved in editing and publishing the newsletter would slightly increase, but the inspirational value of each office's success stories should certainly exceed this cost.

b. Professional Journals

As discussed earlier, professional journals are a superb source of market information and are recognized as an essential part of professional development in a multitude of disciplines (Watkins, 1994). They provide an excellent starting point for contracting personnel to research various market issues. Many provide coverage of scores of industrial sectors, with statistical analyses of supply and demand trends, purchasing indices, and purchasing issues. Regularly studied journals must include those for the industries in which an office buys regularly. Understanding what is happening in a specific industry could give a buyer market insights he would not otherwise have.

Several contracting offices subscribe to a few journals, but they are read only irregularly. Furthermore, they are infrequently incorporated into training lessons.

Incorporation into local training programs, allows the information to be exposed to all personnel, instead of just those who happen to have time to read it.

c. Automation

Automation holds, perhaps, the greatest promise as a communications medium for market research information. The Marine Corps has, in the past several years, made great improvements in its automation overall. One important facet of this is the installation and continual expansion and upgrade of the world's largest Banyan VinesTM Wide Area Network (WAN). This WAN is a global network of hundreds of Local Area Networks (LANs). Through this network, Marines and Marine Corps employees can communicate with any other user virtually anywhere in the world, often even while either is deployed. This network has provided a reliable and quick means of communication, mostly by use of Electronic Mail (E-Mail). According to the interviews, several of the field contracting offices are well-equipped to exploit this network and correspond via E-Mail regularly. Many other offices, however, have very few personnel connected to the network. Most contracting personnel, if they do not actually have a computer on their desk, have easy access to one. Increased use of E-Mail provides another communications channel which can be exploited to share market research information between employees and offices.

One tool that accompanies the WAN/LAN system is a software product named "Tack Board." This is an electronic bulletin board software package. A Tack Board can be placed on each server and is accessible to any WAN user who has been granted access by the owner of the server. An electronic Bulletin Board System (BBS), such as this, is simply space where any authorized user can post messages and documents ranging from a simple "classified advertisement" to a large document which can be read, and often downloaded, by any user.

Tack Board is extremely easy to use and update. One possible use would be to maintain an "Electronic Newsletter" or bulletin board specifically for Marine Corps contracting personnel to post messages and documents which might be of interest to personnel at other Marine Corps installations.

Another automated source of information is commercial bulletin board systems. Several companies have nation-wide or global networks through which a user can access thousands of databases and information sources (several of which were discussed in Chapter II). They include the INTERNET, Prodigy, Compu-Serve, DIALOG, and America Online. One contracting officer, for example, in preparation for a recent solicitation for computer equipment, used Compu-Serve and several other BBSs accessing various databases to find information regarding potential suppliers (Strickland, 1994). Although access to such services require subscription fees, the information they are likely to make available could be immense. Trial subscription by a few base offices could be tested for a year to determine the cost effectiveness of this option.

Electronic Commerce and Electronic Data Interchange (EC/EDI) will bring marvelous opportunities for gathering, analyzing, and sharing information. The Federal Acquisition Streamlining Act (FASA) of 1994 has mandated its use in the form of the Federal Acquisition Computer Network (FACNET).

FACNET will provide for the following functions, among others: inform the public about a broad array of contracting opportunities; set forth details of Government solicitations; permit electronic submission of bids and proposals; facilitate responses to questions about solicitations; provide public notice of contract awards; where practicable, issue orders and make contract payments; compile data about the acquisition process. (Carney, 1994)

As FACNET is installed and used, data collected about procurements and the acquisition process could prove invaluable in preparing new solicitations. Furthermore, the improved visibility of solicitations and planned solicitations will provide an increased opportunity to receive information from interested vendors which will improve the procurement.

3. Advance Procurement Planning

As discussed in Chapters I and II, CICA (§303A and §2301) and the FAR (7.000-7.106) require the use of advance procurement planning in preparing for a procurement. Rushed research done in response to an urgent, last-minute requirement will never match the quality of a well-planned and methodically executed research effort. More often than not, interviewees indicated that they often failed to conduct adequate market research because the customer needed a product immediately and was willing to pay for it, even though they could save money if there were less urgency. The lack of adequate planning, if it leads to an attempt to procure goods or services without full and open competition, could lead to a successful protest by excluded vendors (Cibinic, 1993; pp. 10-21). When contracting personnel have sufficient time, advance planning allows for market research. Effective market research can then reveal the level of competition, the existence of commercial products, and other market information that can be exploited by the contracting officer. This information is often difficult to gather for rushed requirements, and buyers are often forced into procurements under less than ideal conditions.

Some contracting officers do make efforts to ascertain what their customers will need, well in advance of receipt of a purchase request. Some conduct surveys of their customer base, requesting estimates of what they will need the contracting office to buy for them in the coming year. Such a survey provides an opportunity for the contracting officer to

identify potentially troublesome procurements in advance. In coordination with the customer, then, he can initiate market research efforts well in advance. Customer responses to such surveys are typically meager.

Most customers should be able to relatively easily predict what they will need to buy in the coming year. Each organization prepares an annual budget, within which is stated how much will be spent on classes of matériel or individual investment items. Much of these data could be used to help plan procurements for the year. The classes of material could be easily broken down by item, since historical data are available in one of several supply databases. Unfortunately, customers all too often fail to utilize available information to plan ahead with the contracting officer. An annual planning conference could be used as a method of eliciting input from customers. Such a conference, perhaps preceded by a survey, could begin the cooperative planning process. In some cases, even the Major Command's Program Objective Memorandum (POM) or the Future Years Defense Plan (FYDP) could be used to begin the planning process.

4. Provide Adequate Funding

The chief disadvantage of most of these proposed remedies is that they require investment. DAU training is centrally funded by DoD, and, therefore, will not cost the Marine Corps. Internal training should not require much additional funding since existing personnel will be involved. Access to professional journals and automated information sources and commercial databases for the purpose of training could add cost, but it should be minimal. Continual improvement of procurement personnel is the most important investment in the contracting process available. Innovation requires motivated, well-trained, and highly skilled employees. The expense of journals and access to other information sources is greatly outweighed by the potential value of well-trained employees.

Improved access to information could be more costly, initially, than any of the other options. The investment in capital equipment such as LAN Servers and communications cards is significant. In most cases, though, this funding comes from each base or major command. Furthermore, most bases or major commands are eager to continue the improvement of the network. Consequently, the cost to the contracting offices or LBO should be quite small, if there is a cost at all. The cost to access commercial databases can be high. Some discussed in Chapter III can cost as much as \$175 per "connect hour," although most are significantly less. The more common consumer or small business oriented services, such as Prodigy or Compu-Serve, are normally priced less than \$20 per month for access and basic services. Once connected, however, specialized services can add to the charges. These services would have to be used judiciously.

C. SUMMARY

Improvements in the market research efforts within the Marine Corps field contracting community require relatively simple solutions. Increased access to formal training, and a renewed commitment to effective internal training of contracting personnel, as well as customers, can generate major improvements in the procurement process. Easy access to market information is an essential element of any successful market research program. If information sources are at hand and easily used, the likelihood that they will be used is very high. Providing access to commercial market research oriented databases is a relatively inexpensive method of acquiring large volumes of usable information easily and quickly. Promoting person-to-person communication is, arguably, the least expensive, yet most effective method of circulating pertinent research results and market information throughout the Marine Corps. Therefore, besides in person and telephone

communications, media such as the contracting newsletter, E-Mail, and electronic bulletin boards should be vigorously pursued. Finally, advance procurement planning must be conducted to ensure adequate competition is secured and that the Government has time to determine which proposed solution best meets its needs. These measures should yield improved market surveillance abilities, which will lead to optimal procurement decisions. They are cost-effective, and relatively time efficient. They can satisfy the needs of the information user, and they are not overly restrictive on the contracting officer. They allow significant flexibility in application.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. OVERVIEW

Commercial firms have used market research for years to improve their purchasing operations and lower their costs while raising the quality of their material inputs. Market research is required by law when preparing for procurements. In an era of continually shrinking defense budgets, the Government is forced to exploit promising commercial business practices to procure more defense per tax dollar. This thesis examined the role of market research within the Marine Corps field contracting community. It examined the strengths and weaknesses and proposed improvements. Effective market research can yield improved market understanding which can then position contracting personnel to exploit procurement opportunities which would not otherwise be recognized. Cost effective means of pursuing this goal should be championed.

B. THE RESEARCH QUESTIONS

The primary research question was: How might the Marine Corps institute an effective market research program in the field contracting community? To answer this question, four subsidiary questions were explored.

First, What is the current state of market research within Marine Corps Field contracting? In Chapter III, the results of the survey and interviews were enumerated. It discussed the level of understanding of what market research is and what benefits it provides. It exposed some of the attitudes and opinions present in the workforce. It also detailed the most common market research techniques and information sources used. Market research is generally understood and carried out in the Marine Corps field contracting community. It is normally a natural part of the

preparation for solicitation and award because market information is needed to evaluate bids and proposals, to prepare for negotiations, for price comparison, and for responsibility determinations. Contracting personnel generally realize that each procurement may require different degrees of research and different techniques, depending on the commonness and complexity of the product and the mission need. They were confident in the research abilities of the contracting workforce. They agreed that improved market research efforts would probably be cost effective for large dollar procurements for extraordinary items, but that the costs of undertaking such efforts for low dollar, common-item procurements would exceed the benefits gained. They believed competition was sufficient to achieve the lowest practical prices available. Since 97% of field procurements meet the requirement for competition, the market research conducted is generally sufficient to meet the fundamental requirements of CICA and the FAR. There are areas, however, which could be improved.

The second subsidiary research question was: What would be the benefits of a formal Market Research Program within the Marine Corps Field contracting community? Chapter II explained the benefits of effective market research. Chapter III concluded that the contracting workforce had an adequate appreciation for the benefits market research would provide. Effective market research cultivates market understanding, thereby improving procurement decisions by expanding competition, and increasing the probability that a commercial item will be found to fulfill a mission requirement.

The third question was: What is "an effective Market Research program" within the scope of Marine Corps Field contracting needs? Chapter V discussed the criteria an effective market research program should meet. It must be sensitive to the shortage of personnel and man hours available to devote to research. Therefore it must have very time

efficient features. It must also provide for increased training in market research and analysis, and advance procurement planning. Additionally, it must provide understandable, useful, and timely information. Finally, it must not be overly restrictive, but allow flexibility and the exercise of good business judgment by the contracting officers and researchers.

The fourth and final question was: What is the most feasible Market Research program, suited to the Marine Corps field contracting environment? Chapter V outlined proposed market research program improvements for Marine Corps field contracting activities. The proposed measures included increased training in market research techniques and methods. This would come in the form of both external education from DAU schools, and internal professional training within each office, as well as personal education. A well-trained workforce is paramount. All other measures are simply tools for that workforce to employ. Another set of proposed measures encompassed increased access to research material and market information. This included improved workforce communications via electronic means and the contracting newsletter, as well as use of automated information sources inside and outside of Government. Also included was the use of professional journals, including purchasing publications, for personal education, and for incorporation into local training programs. Such journals provide meaningful and useful market information, which can contribute meaningfully to a buyer's market understanding. Finally, the proposed measures included advance procurement planning to more rationally manage procurements and provide ample opportunity for adequate market research.

C. CONCLUSIONS

The following conclusions are drawn from this research:

1. Market research is conducted within the Marine Corps field contracting community. It normally takes the form of market investigations designed to satisfy only immediate information needs.
2. Very little formal market surveillance is conducted. Because of the competitive nature of the procurements conducted, it is assumed that market forces drive prices as low as they can practically go. Consequently, the perceived need for market information is low, and the cost of acquiring market information is perceived to be higher than any potential benefit in competitive procurements.
3. Improved market surveillance is needed to validate or challenge the assumptions regarding market conditions; e.g., level of competition. Market surveillance provides an understanding not otherwise achievable. Insights provided yield quicker, improved procurements.
5. The most significant barriers to the effective implementation of market research in Marine Corps field contracting are personnel shortages, current contracting and collateral duty work load, the availability of training quotas/seats, and inadequate automation.
6. Improved market research efforts can be successfully employed in the Marine Corps field contracting community, provided they are cost effective and time efficient.
7. Local training, with some exceptions, does not adequately promote market research skills or efforts.

D. RECOMMENDATIONS

1. Formal training must be pursued with vigor. The value of a professional education cannot be overstated. While the Marine Corps is

making progress, explicit goals should be established to ensure that the entire workforce is receiving the formal education needed to remain qualified.

2. Included in the formal education should be a similar effort to have regular customers educated in their role in the procurement process. Training in writing specifications and Statements of Work are required to ensure that customers submit usable work statements.
3. Internal training must be improved. Several offices conduct inadequate local training. Combining market research projects with internal training is an effective and efficient way of accomplishing two goals in one effort. The use of professional journals should also be incorporated, since they are an easily accessible source of pertinent market information.
4. Market surveillance must be improved. The market understanding acquired through effective market surveillance can be invaluable. Relatively simple and inexpensive techniques can be used initially. These include incorporating professional journal readings into local training programs, regular scanning of available databases, and exchanging information with other buyers at other Government installations.
5. Improved advance procurement planning must be pursued. In most cases, the tools to conduct such planning are readily available: budget, POM, FYDP, and other planning documents and procurement historical data. The urgency of daily operations simply overshadows the need to conduct such planning. An annual review or survey by the contracting officers or logistics departments will provide an excellent start.
6. Any direction from HQMC regarding market research should be promulgated as "general guidelines," and not as rigid policy. The market conditions and operating environment at each base is somewhat unique. Contracting officers must retain authority to react to local opportunities.

7. Some measures recommended, if deemed too expensive, should be tested at one or two bases, perhaps under the auspices of "reinvention." Once a little history is generated, a cost effectiveness determination can be made.
8. LBO should work to provide a "guidebook" on market research, perhaps expanding on the *Market Analysis for Nondevelopmental Items* guidebook (SD-5) published by OASD (P&L). Any other useful training materials should be made available as well.

E. AREAS FOR FURTHER RESEARCH

The following areas are deemed worthy of further research.

1. Further development of a Taxonomy of Goods in market research.
2. Study market research at a specific Marine Corps installation and propose improvements.

APPENDIX A. INFORMATION SOUGHT

- Product Information:
 - Product Descriptions
 - Producers
 - Potential Uses of a Product
 - Service and Support
 - Price and Price Trends
 - User Training
 - User and Technical Manuals
 - Packaging
 - Transportation
 - Projected Obsolescence
 - Delivery Time
 - Shelf Life
 - Environmental Implications
 - Economic Order Quantities
 - Production Methods
 - Scrap Rates
 - Scrap Disposal and Recovery Methods
 - Specifications and Standards
- Company Information
 - Size
 - Capital Structure
 - Current Contracts and Workload
 - Production and Management Processes
 - Location
 - Subcontractors
 - Production and Service Capabilities
 - Market Share
 - Production History
 - Reputation for Product Performance
 - Reputation as a Quality Producer
 - Schedule Performance
 - Cooperation and Willingness to Work with Customer
- Market, Industry or Economy Information
 - Industry Leaders
 - Current and Projected Market Supply and Demand Conditions
 - Prevailing Prices of Concerned Commodities or Services and Their Component Materials
 - Current and Projected Supplier Base
 - Market Supply and Demand
 - Average Rates (Overhead, G&a, Etc.)
 - Price Forecasts
 - Extent of Competition
 - Effect of Changes in the Business Cycle
 - Production Technology Developments and Trends

- State of Research Efforts
- Political Trends
- Industry Quality Standards
- Environmental Issues
- Corporate Reputations for Performance, Cooperation, Integrity, and Quality
- Degree of Domestic and Foreign Competition
- Seasonal Trends
- Price Related Factors

Source: (Stewart, 1989; pp. 95-101)
(Rhoads, 1992; pp. 2-2 to 2-3)

APPENDIX B. INFORMATION SOURCES

- o U.S. Department of Commerce Publications
- o Foreign Government Publications
- o U.S. Department of Agriculture Publications
- o Trade Newspapers, Magazines, Journals, and Other Publications
- o Purchasing, Contracting, or Other Procurement Personnel in Other Government Agencies
- o Vendor Sales Personnel
- o Vendor Technical Personnel
- o Vendor Catalogs, Advertising Literature, and Other Publications
- o Corporate Annual Reports
- o National Association of Purchasing Management (NAPM) Publications
- o National Contract Management Association (NCMA) Publications
- o Plant and Site Visits
- o Unsolicited Proposals
- o Trade Association Personnel
- o Other Government Agencies Dealing with Private Corporations
- o Dunn and Bradstreet Reports (or Other Commercial Research Firms)
- o U.S. Department of Labor Publications
- o Trade Association Publications
- o Electronic Databases; Government or Commercial
- o Public or Institutional (Universities, Research Centers, Etc.) Libraries
- o University Publications
- o U.S. Department of the Interior Publications
- o Representatives of Foreign Governments
- o United Nations Publications
- o Established Bidders Lists
- o Local or Regional Yellow Pages
- o General Business Periodicals (Wall Street Journal, Fortune, Etc.)
- o General Newspapers and Magazines
- o State and Local Government Publications

Source: (Stewart, 1987; pp. 106, and various sources reviewed by the researcher.)

APPENDIX C. TYPICAL MARKET RESEARCH IMPEDIMENTS

- Diversity of Products and Services Sought
- Lack of Understanding, Commitment, or Policy by Top Management
- Short Run Oriented Management Perspective
- Inadequate Management Information Systems (MIS) and Poor Automation
- Lack of a Developed Body of Knowledge on Market Research
- Organizational, or Structural Limitations
- An Environment That Does Not Reward Creativity and Innovation
- Linking the Costs of Research to Specific Benefits
- Emphasis on One, or Too Few Sources
- Budgetary Shortfall
- Workload
- Manpower
- Unchallenged Assumptions Regarding a Market
- Geographic Purchasing
- Research and Analytical Skills of the Workforce

Source: (Yoder, 1993; pp. 48-68, and various sources)

APPENDIX D. MARKET RESEARCH TECHNIQUES

TECHNIQUE	APPLICATION	IMPACT
1. Investigate the market. Determine current status of technology, extent of commercial applications, and source availability. Evaluate if commercial items can be incorporated into system design and the extent of adaptation needed to meet requirements.	Buy where rapid technological changes influence the way the requirement is stated. Any buy where commercial items could be used.	Market indicators drive the requirements statement and the contracting approach (e.g., multi-year options, type of contract). Substantial savings by adopting or adapting commercial items. Identify impediments to effective competition.
2. Brief industry. Conduct widely publicized briefings on requirements to solicit early comments about the planned approach.	Major buys involving technological advances new contracting approaches, or the chance to use commercial items. Seek out companies who might not be aware of or interested.	Acquire information that will affect the requirements statement, specification development and contracting approach.
3. Contact potential contractors to discuss requirements and get recommendations about a planned approach.	All buys.	Better requirements definition, solicitation development, and competition.
4. Visit potential sources. Target qualified potential sources who typically do not respond to solicitations.	Where history suggests that responses may be insufficient.	Identify and encourage new and possibly better qualified sources to respond to requirements.
5. Attend industry and scientific conferences.	All organizations which need to keep abreast of new development, industry trends, and make contacts.	Knowledge of current technology and commercial successes and failures as applied to military requirements.
6. Acquire literature about commercial products, industry trends, product availability, reliability, and prices.	All requirements.	More sources to solicit. Affects how requirements are stated. Facilitates price analysis. Identifies new products.
7. Analyze procurement history by examining quality and extent of competition, prices, and performance results.	All buys.	Revise requirements, specifications, and contracting approach based on lessons learned.
8. Evaluate and test commercial items full in a military operating environment.	Wherever seemingly artificial barriers to the use of commercial items exist.	Develop data about the performance of commercial items. Determine necessary adaptations and develop cost estimates.
9. Advertise in trade journals and other publications to solicit inquiries.	Any buy where competition is insufficient and CDB announcements are not reaching qualified potential sources.	More responses from new and perhaps better sources.
10. Use the Commerce Business Daily (CBD). Provide complete data, and synopses six weeks or more in advance of solicitation.	All nonexempt procurements over Simplified Acquisition Threshold (SAT).	More inquiries and responses. Sufficient time to receive expressions of interest about a requirement and alert potential sources to the release of the solicitation.
11. Determine why selected contractors do not respond to a solicitation.	All procurements where responses are insufficient or apparently well qualified sources do not respond.	Identify the impediments to effective competition. Document and publicize lessons learned.
12. Examine business and trade association directories.	All buys.	Identify additional sources to solicit and acquire basic information about these sources.
13. Use Federal Procurement Data system information.	All buys where an insufficient number of sources are responding.	Identify current Government contractors, what was purchased, and if the purchase was competitive information about past procurements of the same or similar supplies or services.
14. Examine Federal Supply Schedules.	All requirements that might be satisfied by commercially available products or services.	Identify products or services on schedules at a favorable price and terms.
15. Use PASS and PROFILE data bases.	PASS is a data base of small business firms wishing to do business with the Federal Government. PROFILE is a data base of minority business firms interested in Federal contracts. Product and service listings are available.	Identify qualified small and minority businesses for inclusion in a bidder's list.

Source: (ASPM, 1986; pp. 12-2. Modified for new Simplified Acquisition Threshold.)

APPENDIX E. MARKET RESEARCH SURVEY AND RESULTS

0 NEVER	1 1% - 20%	2 21% - 40%	3 41% - 60%	4 61% - 80%	5 81% - 100%
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1. When researching industry information pertinent to planning for a procurement and source selection, (or simply to gain a better understanding of industrial sectors and general market conditions), what percent of the time do you consult the following sources:

a.	U.S. Department of Commerce Publications	0	1	2	3	4	5
b.	Foreign Government Publications	0	1	2	3	4	5
c.	U.S. Department of Agriculture Publications	0	1	2	3	4	5
d.	Trade Newspapers, Magazines, Journals, and other publications	0	1	2	3	4	5
e.	Purchasing, contracting, or other procurement personnel in other Government agencies	0	1	2	3	4	5
f.	Vendor sales personnel	0	1	2	3	4	5
g.	Vendor technical personnel	0	1	2	3	4	5
h.	Vendor catalogs, advertising literature, and other publications	0	1	2	3	4	5
i.	Corporate annual reports	0	1	2	3	4	5
j.	National Association of Purchasing Management (NAPM) publications	0	1	2	3	4	5
k.	National Contract Management Association (NCMA) publications	0	1	2	3	4	5
l.	Trade association personnel	0	1	2	3	4	5
m.	Other Government agencies dealing with private corporations	0	1	2	3	4	5
n.	Dunn and Bradstreet reports	0	1	2	3	4	5
o.	U.S. Department of Labor Publications	0	1	2	3	4	5
p.	Trade association publications	0	1	2	3	4	5
q.	Public or institutional (universities, research centers, etc.) libraries	0	1	2	3	4	5
r.	University Publications	0	1	2	3	4	5
s.	U.S. Department of the Interior publications	0	1	2	3	4	5
t.	Representatives of foreign governments	0	1	2	3	4	5
u.	United Nations publications	0	1	2	3	4	5
v.	Established Bidders Lists	0	1	2	3	4	5
w.	Local or regional Yellow Pages	0	1	2	3	4	5
x.	General business periodicals (Wall Street Journal, Fortune, etc.)	0	1	2	3	4	5
y.	General newspapers and magazines	0	1	2	3	4	5
z.	State and local government publications	0	1	2	3	4	5
aa.	OTHER	0	1	2	3	4	5
	Please list other research sources and explain below or on a separate sheet. _____						

0	1	2	3	4	5
NEVER	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%

2. When researching industry information pertinent to planning for a procurement and source selection, (or simply to gain a better understanding of industrial sectors and general market conditions), what percent of the time do you utilize any of the following practices:

a. Utilize commercially available on-line automated market research oriented services or other automated systems 0 1 2 3 4 5
Please list and explain:

b. Attend industry conferences and conventions 0 1 2 3 4 5
c. Conduct a full market investigation 0 1 2 3 4 5
d. Visits to potential contractors' facilities 0 1 2 3 4 5
e. Conduct industry briefings 0 1 2 3 4 5
f. Contact potential contractors to discuss requirements and get recommendations about a planned acquisition 0 1 2 3 4 5
g. Analyze procurement history with regard to quality, degree and nature of competition, prices, and performance 0 1 2 3 4 5
h. Advertise in trade journals and other publications 0 1 2 3 4 5
i. Attempt to determine why selected contractors do not respond to solicitations 0 1 2 3 4 5
j. Examine business and trade association directories (Thomas Register, MacRea's Blue Book, etc.) 0 1 2 3 4 5
k. Use PASS, PROFILE, Procurement Management Reporting System (PMRS), or other Government databases and automated systems 0 1 2 3 4 5
l. Examine Federal Supply Schedules 0 1 2 3 4 5
m. Contract for the services of commercial market Research firms or consultants 0 1 2 3 4 5

3. What percent of your procurement actions are in: 0 1 2 3 4 5
a. inherently highly competitive Markets (anticipate 10 or more offerors/bidders)? 0 1 2 3 4 5
b. Moderately competitive (anticipate 5-10 offerors/bidders)? 0 1 2 3 4 5
c. Low competition (anticipate 2-5 offerors/bidders)? 0 1 2 3 4 5
d. No competition 0 1 2 3 4 5

4. What percent of your procurement dollars are spent in inherently highly competitive Markets? 0 1 2 3 4 5

1	2	3	4	5
Strongly	Disagree	Unsure	Agree	Strongly
Disagree				Agree

5. What benefits would you expect to realize if you undertook regular, formal Market Research activities? If you currently have a formal Market Research program, what benefits do you realize from it?
- | | | | | | | |
|----|---|---|---|---|---|---|
| a. | Understanding impediments to competition | 1 | 2 | 3 | 4 | 5 |
| b. | Identifying new potential sources of supply | 1 | 2 | 3 | 4 | 5 |
| c. | Better requirements definition | 1 | 2 | 3 | 4 | 5 |
| d. | Better specifications and/or SOW | 1 | 2 | 3 | 4 | 5 |
| e. | Discovering new or higher quality products to fill requirements | 1 | 2 | 3 | 4 | 5 |
| f. | Increased competition | 1 | 2 | 3 | 4 | 5 |
| g. | Improved product/service quality | 1 | 2 | 3 | 4 | 5 |
| h. | Improved price analysis | 1 | 2 | 3 | 4 | 5 |
| i. | Improved negotiation positions or abilities | 1 | 2 | 3 | 4 | 5 |
| j. | OTHER: | 1 | 2 | 3 | 4 | 5 |
- Please list other benefits or explain why you don't expect certain benefits:
-
-
-
-
6. The benefits your organization is likely to realize from undertaking regular Market Research efforts materially outweigh the costs of such efforts? 1 2 3 4 5
7. Improvements in Electronic Data Interchange within the field contracting community will significantly enhance your Market Research abilities by making available more raw data 1 2 3 4 5
8. The classes of products and services procured have little bearing on the degree of Market Research you conduct or the Market Research techniques you utilize 1 2 3 4 5
9. Market research efforts beyond those normally undertaken by my activity are necessary, given **current and foreseeable**: commodities and services procured, economies of scale, developed corporate knowledge, customer demand, and market availability, 1 2 3 4 5
10. Given the current and foreseeable level of expertise and training, do you believe that you and your contracting personnel are able to effectively undertake any of the following activities:
- | | | | | | | |
|----|--|---|---|---|---|---|
| a. | Analyze new production processes | 1 | 2 | 3 | 4 | 5 |
| b. | Analyze your (including your customers') current and projected demand for a product or service, as well as your current inventory and lead times | 1 | 2 | 3 | 4 | 5 |
| c. | Analyze competing demand, both current and projected, by industry for a given product or service | 1 | 2 | 3 | 4 | 5 |
| d. | Assess the reliability of sources of supply | 1 | 2 | 3 | 4 | 5 |

1	2	3	4	5
Strongly	Disagree	Unsure	Agree	Strongly
Disagree				Agree

- e. Assess the quality of a potential contractor's products and services 1 2 3 4 5
- f. Assess a company's labor situation and other resource conditions 1 2 3 4 5
- g. Analyze production capacity and potential 1 2 3 4 5
- h. Assess capacities and capabilities of new potential sources of supply 1 2 3 4 5
- i. Analyze financial health of a potential source 1 2 3 4 5
- j. Analyzing cost and price trends 1 2 3 4 5
- k. Assess the impact of trade developments on supply, demand, costs, and prices 1 2 3 4 5
- l. Analyze Corporate marketing, sales, and pricing strategies 1 2 3 4 5
- m. Analyze a company's market position 1 2 3 4 5
- n. Assess industry economic trends 1 2 3 4 5
- o. Analyze the status and potential of applicable technology 1 2 3 4 5

11. Are the following significant **impediments** to instituting an effective Market Research program at your activity? Consider both current and foreseeable resources, constraints, and operating environment:

- a. Personnel Strength 1 2 3 4 5
- b. Contracting work load 1 2 3 4 5
- c. Collateral duties and/or non-contracting work load 1 2 3 4 5
- d. Expertise level of key personnel 1 2 3 4 5
- e. Training opportunities 1 2 3 4 5
- f. Ineffectual or lack of policy or guidance from higher command levels 1 2 3 4 5
- g. Available funding or budgetary resources 1 2 3 4 5
- h. Availability of Automated Data Processing (ADP) and Management Information Systems (MIS) assets and training 1 2 3 4 5
- i. Geography 1 2 3 4 5
- j. Diversity of products and services normally procured by your activity 1 2 3 4 5
- k. Lack of understanding or commitment from top management 1 2 3 4 5
- l. Short run vs long run management perspective (at any level) 1 2 3 4 5
- m. Environment which does not reward creativity 1 2 3 4 5
- n. difficulty in linking costs of market research to direct and specific benefits or outcomes 1 2 3 4 5
- o. Laws and regulations 1 2 3 4 5
- p. Lack of a developed professional body of knowledge 1 2 3 4 5
- q. Structural inhibitors in the organization 1 2 3 4 5
- r. OTHER 1 2 3 4 5

Please list and explain other impediments:

- | | | | | | |
|--|----------|----------|--------|-------|----------|
| | 1 | 2 | 3 | 4 | 5 |
| | Strongly | Disagree | Unsure | Agree | Strongly |
| | Disagree | | | | Agree |
12. Given current resources (funds, time, personnel, available training, etc.) and operating environment, it is feasible for my activity to carry out effective market research activities 1 2 3 4 5

13. Does your activity currently have a formal Market Research program? _____

14. Please rank the following measures according to their practical value in establishing an effective market research program and their feasibility, considering current and foreseeable conditions:

		VALUE	FEASIBILITY
a.	Definitive policy statement or regulation direction from higher headquarters	_____	_____
b.	Each field contracting activity institute its own market research program	_____	_____
c.	A professional cell of researchers be established at HQMC level to assist in market research efforts and to train local activities in market research techniques	_____	_____
d.	Professional cells of researchers be established regionally, to assist in market research efforts and to train local activities in market research techniques	_____	_____
e.	HQMC provide market research guidebook and/or other training materials	_____	_____
f.	Utilize the services of professional commercial research firms	_____	_____
g.	OTHER: Please explain...	_____	_____

15. Are Market Research plans, programs or issues evaluated on internal or external organizational evaluations (PMRs, etc)? (YES/NO)

16. Has the Market Research requirement set forth in the Competition in Contracting Act (CICA) and the FAR been translated into Standard Operating Procedures (YES/NO)

17. If necessary, may I cite your responses specifically when discussing these issues in my thesis? (YES/NO)

18. Please provide other comments and suggestions regarding any question here. Enclose additional sheets if necessary.

SURVEY RESULTS

	Questionnaires 2-22			> Q. 13, 15, 16, 17; N= "W/0", Y= "W/1"								
RSP#	0"	1"	2"	3"	4"	5"	Perc 0	Perc 1	Perc 2	Perc 3	Perc 4	perc 5
Q1a	12	5	2	0	0	2	57.14	23.81	9.52	0.00	0.00	9.52
Q1b	17	4	0	0	0	0	80.95	19.05	0.00	0.00	0.00	0.00
Q1c	15	4	1	0	0	1	71.43	19.05	4.76	0.00	0.00	4.76
Q1d	4	4	5	4	1	3	19.05	19.05	23.81	19.05	4.76	14.29
Q1e	3	6	4	4	3	1	14.29	28.57	19.05	19.05	14.29	4.76
Q1f	2	4	6	2	4	3	9.52	19.05	28.57	9.52	19.05	14.29
Q1g	3	5	6	2	4	1	14.29	23.81	28.57	9.52	19.05	4.76
Q1h	1	2	2	3	8	5	4.76	9.52	9.52	14.29	38.10	23.81
Q1i	15	5	1	0	0	0	71.43	23.81	4.76	0.00	0.00	0.00
Q1j	18	3	0	0	0	0	85.71	14.29	0.00	0.00	0.00	0.00
Q1k	14	5	2	0	0	0	66.67	23.81	9.52	0.00	0.00	0.00
Q1l	7	7	5	1	1	0	33.33	33.33	23.81	4.76	4.76	0.00
Q1m	7	6	3	2	2	1	33.33	28.57	14.29	9.52	9.52	4.76
Q1n	10	5	2	0	3	1	47.62	23.81	9.52	0.00	14.29	4.76
Q1o	13	3	1	2	1	1	61.90	14.29	4.76	9.52	4.76	4.76
Q1p	7	4	2	7	1	0	33.33	19.05	9.52	33.33	4.76	0.00
Q1q	18	2	1	0	0	0	85.71	9.52	4.76	0.00	0.00	0.00
Q1r	19	1	1	0	0	0	90.48	4.76	4.76	0.00	0.00	0.00
Q1s	18	3	0	0	0	0	85.71	14.29	0.00	0.00	0.00	0.00
Q1t	19	2	0	0	0	0	90.48	9.52	0.00	0.00	0.00	0.00
Q1u	20	0	0	0	0	1	95.24	0.00	0.00	0.00	0.00	4.76
Q1v	3	1	1	2	8	6	14.29	4.76	4.76	9.52	38.10	28.57
Q1w	2	1	4	7	6	1	9.52	4.76	19.05	33.33	28.57	4.76
Q1x	10	5	3	2	0	1	47.62	23.81	14.29	9.52	0.00	4.76
Q1y	6	8	6	0	0	1	28.57	38.10	28.57	0.00	0.00	4.76
Q1z	15	1	3	1	0	1	71.43	4.76	14.29	4.76	0.00	4.76
Q1aa	17	0	1	3	0	0	80.95	0.00	4.76	14.29	0.00	0.00

Q2a	16	1	0	2	2	0	76.19	4.76	0.00	9.52	9.52	0.00
Q2b	9	6	3	3	0	0	42.86	28.57	14.29	14.29	0.00	0.00
Q2c	9	7	2	1	1	1	42.86	33.33	9.52	4.76	4.76	4.76
Q2d	8	7	4	2	0	0	38.10	33.33	19.05	9.52	0.00	0.00
Q2e	13	5	3	0	0	0	61.90	23.81	14.29	0.00	0.00	0.00
Q2f	4	9	4	2	1	1	19.05	42.86	19.05	9.52	4.76	4.76
Q2g	2	3	4	2	9	1	9.52	14.29	19.05	9.52	42.86	4.76
Q2h	15	4	0	1	1	0	71.43	19.05	0.00	4.76	4.76	0.00
Q2i	2	13	3	2	0	1	9.52	61.90	14.29	9.52	0.00	4.76
Q2j	3	4	6	4	3	1	14.29	19.05	28.57	19.05	14.29	4.76
Q2k	14	1	1	3	2	0	66.67	4.76	4.76	14.29	9.52	0.00
Q2l	1	1	5	4	3	7	4.76	4.76	23.81	19.05	14.29	33.33
Q2m	18	2	0	1	0	0	85.71	9.52	0.00	4.76	0.00	0.00
Q3a	2	4	6	5	1	3	9.52	19.05	28.57	23.81	4.76	14.29
Q3b	1	5	8	3	2	2	4.76	23.81	38.10	14.29	9.52	9.52
Q3c	2	7	5	3	2	2	9.52	33.33	23.81	14.29	9.52	9.52
Q3d	3	16	0	2	0	0	14.29	76.19	0.00	9.52	0.00	0.00
Q4	2	2	2	5	6	4	9.52	9.52	9.52	23.81	28.57	19.05
Q5a	0	0	4	4	7	6	0.00	0.00	19.05	19.05	33.33	28.57
Q5b	0	0	0	2	11	8	0.00	0.00	0.00	9.52	52.38	38.10
Q5c	0	0	1	7	4	9	0.00	0.00	4.76	33.33	19.05	42.86
Q5d	0	0	2	6	5	8	0.00	0.00	9.52	28.57	23.81	38.10
Q5e	0	0	2	6	7	6	0.00	0.00	9.52	28.57	33.33	28.57
Q5f	0	0	1	7	5	8	0.00	0.00	4.76	33.33	23.81	38.10
Q5g	0	0	3	6	7	5	0.00	0.00	14.29	28.57	33.33	23.81
Q5h	0	0	4	6	7	4	0.00	0.00	19.05	28.57	33.33	19.05
Q5i	0	0	3	7	7	4	0.00	0.00	14.29	33.33	33.33	19.05
Q5j	17	0	0	1	3	0	80.95	0.00	0.00	4.76	14.29	0.00
Q6	0	2	6	7	3	3	0.00	9.52	28.57	33.33	14.29	14.29
Q7	0	2	1	4	8	6	0.00	9.52	4.76	19.05	38.10	28.57
Q8	0	5	8	3	4	1	0.00	23.81	38.10	14.29	19.05	4.76
Q9	1	2	5	4	6	3	4.76	9.52	23.81	19.05	28.57	14.29

Q10a	0	3	7	4	6	1	0.00	14.29	33.33	19.05	28.57	4.76
Q10b	0	2	3	3	10	3	0.00	9.52	14.29	14.29	47.62	14.29
Q10c	0	2	4	8	6	1	0.00	9.52	19.05	38.10	28.57	4.76
Q10d	0	0	1	1	16	3	0.00	0.00	4.76	4.76	76.19	14.29
Q10e	0	0	2	3	12	4	0.00	0.00	9.52	14.29	57.14	19.05
Q10f	0	2	5	5	8	1	0.00	9.52	23.81	23.81	38.10	4.76
Q10g	0	2	6	6	6	1	0.00	9.52	28.57	28.57	28.57	4.76
Q10h	0	1	5	8	7	0	0.00	4.76	23.81	38.10	33.33	0.00
Q10i	0	2	5	5	8	1	0.00	9.52	23.81	23.81	38.10	4.76
Q10j	0	2	1	6	12	0	0.00	9.52	4.76	28.57	57.14	0.00
Q10k	0	2	7	4	8	0	0.00	9.52	33.33	19.05	38.10	0.00
Q10l	0	2	7	10	2	0	0.00	9.52	33.33	47.62	9.52	0.00
Q10m	0	2	5	9	5	0	0.00	9.52	23.81	42.86	23.81	0.00
Q10n	0	2	3	9	7	0	0.00	9.52	14.29	42.86	33.33	0.00
Q10o	1	2	4	8	6	0	4.76	9.52	19.05	38.10	28.57	0.00
Q11a	0	0	2	2	8	9	0.00	0.00	9.52	9.52	38.10	42.86
Q11b	0	0	2	1	12	6	0.00	0.00	9.52	4.76	57.14	28.57
Q11c	0	0	6	2	8	5	0.00	0.00	28.57	9.52	38.10	23.81
Q11d	0	0	4	9	4	4	0.00	0.00	19.05	42.86	19.05	19.05
Q11e	0	0	4	9	5	3	0.00	0.00	19.05	42.86	23.81	14.29
Q11f	0	0	7	3	5	6	0.00	0.00	33.33	14.29	23.81	28.57
Q11g	0	0	2	5	11	3	0.00	0.00	9.52	23.81	52.38	14.29
Q11h	0	0	2	5	11	3	0.00	0.00	9.52	23.81	52.38	14.29
Q11i	1	3	8	1	4	4	4.76	14.29	38.10	4.76	19.05	19.05
Q11j	0	1	10	1	5	4	0.00	4.76	47.62	4.76	23.81	19.05
Q11k	0	2	7	2	6	4	0.00	9.52	33.33	9.52	28.57	19.05
Q11l	0	0	5	6	6	4	0.00	0.00	23.81	28.57	28.57	19.05
Q11m	0	2	6	4	5	4	0.00	9.52	28.57	19.05	23.81	19.05
Q11n	0	1	4	5	7	4	0.00	4.76	19.05	23.81	33.33	19.05
Q11o	0	2	8	3	5	3	0.00	9.52	38.10	14.29	23.81	14.29
Q11p	0	1	5	5	6	4	0.00	4.76	23.81	23.81	28.57	19.05
Q11q	0	3	7	4	4	3	0.00	14.29	33.33	19.05	19.05	14.29

Q11r	17	1	0	1	1	1	80.95	4.76	0.00	4.76	4.76	4.76
Q12	0	2	6	4	7	2	0.00	9.52	28.57	19.05	33.33	9.52
Q13	21	0	0	0	0	0	100.00	0.00	0.00	0.00	0.00	0.00
Q14Va	0	2	6	6	3	4	0.00	9.52	28.57	28.57	14.29	19.05
Q14Vb	0	1	4	3	10	3	0.00	4.76	19.05	14.29	47.62	14.29
Q14Vc	0	3	3	5	8	2	0.00	14.29	14.29	23.81	38.10	9.52
Q14Vd	0	2	2	7	6	4	0.00	9.52	9.52	33.33	28.57	19.05
Q14Ve	0	2	2	6	7	4	0.00	9.52	9.52	28.57	33.33	19.05
Q14Vf	0	3	5	4	6	3	0.00	14.29	23.81	19.05	28.57	14.29
Q14Vg	18	0	0	1	1	1	85.71	0.00	0.00	4.76	4.76	4.76
Q14Fa	1	5	2	5	3	5	4.76	23.81	9.52	23.81	14.29	23.81
Q14Fb	1	1	2	6	6	5	4.76	4.76	9.52	28.57	28.57	23.81
Q14Fc	1	7	4	6	2	1	4.76	33.33	19.05	28.57	9.52	4.76
Q14Fd	1	7	2	6	4	1	4.76	33.33	9.52	28.57	19.05	4.76
Q14Fe	1	3	2	4	8	3	4.76	14.29	9.52	19.05	38.10	14.29
Q14Ff	1	7	2	6	4	1	4.76	33.33	9.52	28.57	19.05	4.76
Q14Fg	19	0	1	0	1	0	90.48	0.00	4.76	0.00	4.76	0.00
Q15	18	3	0	0	0	0	85.71	14.29	0.00	0.00	0.00	0.00
Q16	14	7	0	0	0	0	66.67	33.33	0.00	0.00	0.00	0.00
Q17	3	18	0	0	0	0	14.29	85.71	0.00	0.00	0.00	0.00

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